

**C**

## SAFETY DATA SHEET

Revision Date 22-May-2017

Revision Number 2

### 1. Identification

**Product Name** Cadmium  
**Cat No. :** C3-500  
**Synonyms** No information available  
**Recommended Use** Laboratory chemicals.  
**Uses advised against** Not for food, drug, pesticide or biocidal product use

#### Details of the supplier of the safety data sheet

##### Company

Fisher Scientific  
One Reagent Lane  
Fair Lawn, NJ 07410  
Tel: (201) 796-7100

##### Emergency Telephone Number

CHEMTREC®, Inside the USA: 800-424-9300  
CHEMTREC®, Outside the USA: 001-703-527-3887

##### Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Flammable solids	Category 2
Acute oral toxicity	Category 4
Acute dermal toxicity	Category 4
Acute Inhalation Toxicity - Dusts and Mists	Category 2
Germ Cell Mutagenicity	Category 2
Carcinogenicity	Category 1A
Reproductive Toxicity	Category 2
Specific target organ toxicity (single exposure)	Category 3
Target Organs - Respiratory system.	
Specific target organ toxicity - (repeated exposure)	Category 1
Target Organs - Kidney, Blood.	
Combustible dust	Yes

##### Label Elements

##### Signal Word

Danger

##### Hazard Statements

Flammable solid  
May form combustible dust concentrations in air  
Fatal if inhaled  
Harmful if swallowed  
Harmful in contact with skin

May cause respiratory irritation  
 Suspected of causing genetic defects  
 May cause cancer  
 Suspected of damaging fertility. Suspected of damaging the unborn child  
 Causes damage to organs through prolonged or repeated exposure



**Precautionary Statements**

**Prevention**

Obtain special instructions before use  
 Do not handle until all safety precautions have been read and understood  
 Use personal protective equipment as required  
 Wash face, hands and any exposed skin thoroughly after handling  
 Do not eat, drink or smoke when using this product  
 Do not breathe dust/fume/gas/mist/vapors/spray  
 Use only outdoors or in a well-ventilated area  
 Ground/bond container and receiving equipment  
 Use explosion-proof electrical/ventilating/lighting/equipment

**Response**

IF exposed or concerned: Get medical attention/advice

**Inhalation**

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing  
 Immediately call a POISON CENTER or doctor/physician

**Skin**

IF ON SKIN: Wash with plenty of soap and water  
 Wash contaminated clothing before reuse  
 Call a POISON CENTER or doctor/physician if you feel unwell

**Ingestion**

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell  
 Rinse mouth

**Fire**

Fight fire with normal precautions from a reasonable distance  
 Evacuate area

**Storage**

Store locked up  
 Store in a well-ventilated place. Keep container tightly closed

**Disposal**

Dispose of contents/container to an approved waste disposal plant

**Hazards not otherwise classified (HNOC)**

Very toxic to aquatic life with long lasting effects  
 WARNING! This product contains a chemical known in the State of California to cause cancer, birth defects or other reproductive harm.



Component	CAS-No	Weight %
Cadmium	7440-43-9	100



<b>General Advice</b>	Show this safety data sheet to the doctor in attendance. Immediate medical attention is required.
<b>Eye Contact</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
<b>Skin Contact</b>	Wash off immediately with plenty of water for at least 15 minutes. Immediate medical attention is required.
<b>Inhalation</b>	Move to fresh air. If not breathing, give artificial respiration. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Immediate medical attention is required.
<b>Ingestion</b>	Do not induce vomiting. Call a physician or Poison Control Center immediately.
<b>Most important symptoms/effects</b>	None reasonably foreseeable. . Kidney disorders: May cause harm to the unborn child: Blood disorders
<b>Notes to Physician</b>	Treat symptomatically

<b>Unsuitable Extinguishing Media</b>	No information available
<b>Flash Point Method -</b>	No information available No information available
<b>Autoignition Temperature</b>	No information available
<b>Explosion Limits</b>	
<b>Upper</b>	No data available
<b>Lower</b>	No data available
<b>Sensitivity to Mechanical Impact</b>	No information available
<b>Sensitivity to Static Discharge</b>	No information available

**Specific Hazards Arising from the Chemical**

Thermal decomposition can lead to release of irritating gases and vapors. Fine dust dispersed in air may ignite. Dust can form an explosive mixture in air. Pyrophoric properties of solids and liquids. Do not allow run-off from fire fighting to enter drains or water courses.

**Hazardous Combustion Products**

Highly toxic fumes

**Protective Equipment and Precautions for Firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Thermal decomposition can lead to release of irritating gases and vapors.

**NFPA**

<b>Health</b>	<b>Flammability</b>	<b>Instability</b>	<b>Physical hazards</b>
4	1	0	N/A

<b>Personal Precautions</b>	Ensure adequate ventilation. Use personal protective equipment. Avoid dust formation. Keep people away from and upwind of spill/leak. Evacuate personnel to safe areas.
<b>Environmental Precautions</b>	Do not flush into surface water or sanitary sewer system. Do not allow material to contaminate ground water system. Prevent product from entering drains. Local authorities should be advised if significant spillages cannot be contained.
<b>Methods for Containment and Clean Up</b>	Sweep up or vacuum up spillage and collect in suitable container for disposal. Avoid dust formation.

**7. Handling and storage**

**Handling** Wear personal protective equipment. Do not get in eyes, on skin, or on clothing. Avoid dust formation. Use only under a chemical fume hood. Do not breathe vapors/dust. Do not ingest.

**Storage** Keep containers tightly closed in a dry, cool and well-ventilated place. Store under an inert atmosphere.

**8. Exposure controls, personal protection**

**Exposure Guidelines**

Component	ACGIH TLV	OSHA PEL	NIOSH IDLH	Mexico OEL (TWA)
Cadmium	TWA: 0.01 mg/m <sup>3</sup> TWA: 0.002 mg/m <sup>3</sup>	Ceiling: 0.3 mg/m <sup>3</sup> Ceiling: 0.6 mg/m <sup>3</sup> (Vacated) STEL: 0.3 ppm TWA: 0.1 mg/m <sup>3</sup> TWA: 0.2 mg/m <sup>3</sup> TWA: 5 µg/m <sup>3</sup>	IDLH: 9 mg/m <sup>3</sup>	TWA: 0.01 mg/m <sup>3</sup> TWA: 0.002 mg/m <sup>3</sup>

- American Conference of Governmental Industrial Hygienists
- Occupational Safety and Health Administration
- The National Institute for Occupational Safety and Health Immediately Dangerous to Life or Health

**Engineering Measures** Use only under a chemical fume hood. Ensure that eyewash stations and safety showers are close to the workstation location.

**Personal Protective Equipment**

**Eye/face Protection** Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

**Skin and body protection** Long sleeved clothing.

**Respiratory Protection** Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

**Hygiene Measures** When using, do not eat, drink or smoke. Provide regular cleaning of equipment, work area and clothing. Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product. Keep away from food, drink and animal feeding stuffs.

**Physical and chemical properties**

<b>Physical State</b>	Solid
<b>Appearance</b>	Silver
<b>Odor</b>	Odorless
<b>Odor Threshold</b>	No information available
<b>pH</b>	No information available
<b>Melting Point/Range</b>	321 °C / 609.8 °F
<b>Boiling Point/Range</b>	765 °C / 1409 °F @ 760 mmHg
<b>Flash Point</b>	No information available
<b>Evaporation Rate</b>	Not applicable
<b>Flammability (solid,gas)</b>	No information available

<b>Flammability or explosive limits</b>	
Upper	No data available
Lower	No data available
Vapor Pressure	No information available
Vapor Density	Not applicable
Specific Gravity	8.64 @ 25°C
Solubility	insoluble in water
Partition coefficient; n-octanol/water	No data available
Autoignition Temperature	No information available
Decomposition Temperature	No information available
Viscosity	Not applicable
Molecular Formula	Cd
Molecular Weight	112.40

<b>Reactive Hazard</b>	None known, based on information available
<b>Stability</b>	Stable under recommended storage conditions. Moisture sensitive. Air sensitive.
<b>Conditions to Avoid</b>	Incompatible products. Excess heat. Avoid dust formation. Exposure to air or moisture over prolonged periods.
<b>Incompatible Materials</b>	Strong oxidizing agents, Strong acids, Sulfur oxides
<b>Hazardous Decomposition Products</b>	Highly toxic fumes
<b>Hazardous Polymerization</b>	Hazardous polymerization does not occur.
<b>Hazardous Reactions</b>	None under normal processing.

### Acute Toxicity

#### Product Information Component Information

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Cadmium	LD50 = 1140 mg/kg ( Rat )	Not listed	LC50 = 25 mg/m <sup>3</sup> ( Rat ) 30 min

**Toxicologically Synergistic Products** No information available

#### Delayed and immediate effects as well as chronic effects from short and long-term exposure

<b>Irritation</b>	No information available
<b>Sensitization</b>	No information available
<b>Carcinogenicity</b>	The table below indicates whether each agency has listed any ingredient as a carcinogen.

Component	CAS-No	IARC	NTP	ACGIH	OSHA	Mexico
Cadmium	7440-43-9	Group 1	Known	A2	X	A2

*IARC: (International Agency for Research on Cancer)*

*Group 1 - Carcinogenic to Humans*

*Group 2A - Probably Carcinogenic to Humans*

*Group 2B - Possibly Carcinogenic to Humans*

*NTP: (National Toxicity Program)*

*Known - Known Carcinogen*

*Reasonably Anticipated - Reasonably Anticipated to be a Human Carcinogen*

*A1 - Known Human Carcinogen*

*A2 - Suspected Human Carcinogen*

A3 - Animal Carcinogen  
 ACGIH: (American Conference of Governmental Industrial Hygienists)

- Mutagenic Effects** Possible risk of irreversible effects
- Reproductive Effects** Possible risk of impaired fertility. May cause harm to the unborn child.
- Developmental Effects** No information available.
- Teratogenicity** No information available.
- STOT - single exposure** Respiratory system
- STOT - repeated exposure** Kidney Blood
- Aspiration hazard** No information available
- Symptoms / effects, both acute and delayed** Kidney disorders: May cause harm to the unborn child: Blood disorders
- Endocrine Disruptor Information** No information available
- Other Adverse Effects** The toxicological properties have not been fully investigated.



**Ecotoxicity**

The product contains following substances which are hazardous for the environment. Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Component	Freshwater Algae	Freshwater Fish	Microtox	Water Flea
Cadmium	Not listed	LC50: 0.0004 - 0.003 mg/L, 96h (Pimephales promelas) LC50: = 0.016 mg/L, 96h (Oryzias latipes) LC50: = 21.1 mg/L, 96h flow-through (Lepomis macrochirus) LC50: = 0.24 mg/L, 96h static (Cyprinus carpio) LC50: = 4.26 mg/L, 96h semi-static (Cyprinus carpio) LC50: = 0.002 mg/L, 96h (Cyprinus carpio) LC50: = 0.006 mg/L, 96h static (Oncorhynchus mykiss) LC50: = 0.003 mg/L, 96h flow-through (Oncorhynchus mykiss)	Not listed	EC50: = 0.0244 mg/L, 48h Static (Daphnia magna)

**Persistence and Degradability** No information available

**Bioaccumulation/ Accumulation** No information available.

**Mobility** No information available.

**13. Disposal Considerations**  
**Waste Disposal Methods** Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

**14. Transport Information**

**DOT**

**UN-No** UN2930  
**Proper Shipping Name** TOXIC SOLIDS, FLAMMABLE, ORGANIC, N.O.S.  
**Proper technical name** Cadmium  
**Hazard Class** 6.1  
**Subsidiary Hazard Class** 4.1  
**Packing Group** I

**TDG**

**UN-No** UN2930  
**Proper Shipping Name** TOXIC SOLID, FLAMMABLE, ORGANIC, N.O.S.  
**Hazard Class** 6.1  
**Subsidiary Hazard Class** 4.1  
**Packing Group** I

**IATA**

**UN-No** UN2930  
**Proper Shipping Name** TOXIC SOLID, FLAMMABLE, ORGANIC, N.O.S.  
**Hazard Class** 6.1  
**Subsidiary Hazard Class** 4.1  
**Packing Group** I

**IMDG/IMO**

**UN-No** UN2930  
**Proper Shipping Name** TOXIC SOLID, FLAMMABLE, ORGANIC, N.O.S.  
**Hazard Class** 6.1  
**Subsidiary Hazard Class** 4.1  
**Packing Group** I

**International Inventories**

Component	TSCA	DSL	NDSL	EINECS	ELINCS	NLP	PICCS	ENCS	AICS	IECSC	KECL
Cadmium	X	X	-	231-152-8	-		X	-	X	X	X

**Legend:**

X - Listed

E - Indicates a substance that is the subject of a Section 5(e) Consent order under TSCA.

F - Indicates a substance that is the subject of a Section 5(f) Rule under TSCA.

N - Indicates a polymeric substance containing no free-radical initiator in its inventory name but is considered to cover the designated polymer made with any free-radical initiator regardless of the amount used.

P - Indicates a commenced PMN substance

R - Indicates a substance that is the subject of a Section 6 risk management rule under TSCA.

S - Indicates a substance that is identified in a proposed or final Significant New Use Rule

T - Indicates a substance that is the subject of a Section 4 test rule under TSCA.

XU - Indicates a substance exempt from reporting under the Inventory Update Rule, i.e. Partial Updating of the TSCA Inventory Data Base Production and Site Reports (40 CFR 710(B)).

Y1 - Indicates an exempt polymer that has a number-average molecular weight of 1,000 or greater.

Y2 - Indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants that comprises one of the eligibility criteria for the exemption rule.

**U.S. Federal Regulations**



TSCA 12(b) Not applicable

**SARA 313**

Component	CAS-No	Weight %	SARA 313 - Threshold Values %
Cadmium	7440-43-9	100	0.1

**SARA 311/312 Hazard Categories**

Acute Health Hazard	Yes
Chronic Health Hazard	Yes
Fire Hazard	Yes
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

**CWA (Clean Water Act)**

Component	CWA - Hazardous Substances	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants
Cadmium	-	-	X	X

**Clean Air Act**

Component	HAPS Data	Class 1 Ozone Depletors	Class 2 Ozone Depletors
Cadmium	X		-

OSHA Occupational Safety and Health Administration  
Not applicable

Component	Specifically Regulated Chemicals	Highly Hazardous Chemicals
Cadmium	5 µg/m³ TWA 2.5 µg/m³ Action Level	-

**CERCLA**

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Component	Hazardous Substances RQs	CERCLA EHS RQs
Cadmium	10 lb	-

**California Proposition 65** This product contains the following proposition 65 chemicals

Component	CAS-No	California Prop. 65	Prop 65 NSRL	Category
Cadmium	7440-43-9	Carcinogen Developmental Male Reproductive	0.05 µg/day	Developmental Carcinogen

**U.S. State Right-to-Know Regulations**

Component	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Cadmium	X	X	X	X	X

**U.S. Department of Transportation**

Reportable Quantity (RQ):	Y
DOT Marine Pollutant	N
DOT Severe Marine Pollutant	N

**U.S. Department of Homeland Security**

This product does not contain any DHS chemicals.

**Other International Regulations**

**Mexico - Grade** No information available

**Prepared By** Regulatory Affairs  
Thermo Fisher Scientific  
Email: EMSDS.RA@thermofisher.com

**Revision Date** 22-May-2017  
**Print Date** 22-May-2017  
**Revision Summary** This document has been updated to comply with the US OSHA HazCom 2012 Standard replacing the current legislation under 29 CFR 1910.1200 to align with the Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

**End of SDS**

**Section 1 Chemical Product and Company Information** Page E1 of E2



80 Northwest Blvd.  
Nashua, NH 03063  
(800) 225-3739

**CHEMTREC 24 Hour Emergency**  
**Phone Number (800) 424-9300**  
For laboratory use only.  
Not for drug, food or household use.

<b>Product</b>	CALCIUM CARBIDE
<b>Synonyms</b>	Acetylenogen / Carbide

**Section 2 Hazards Identification**

**Signal word:** DANGER  
**Pictograms:** GHS02  
**Target organs:** None known



**GHS Classification:**  
Water reactivity (Category 1)

**GHS Label information: Hazard statement:**  
H260: In contact with water releases flammable gases which may ignite spontaneously.

**Precautionary statement:**  
P223: Do not allow contact with water.  
P231+P232: Handle under inert gas. Protect from moisture.  
P280: Wear protective gloves/protective clothing/eye protection/face protection.  
P335+P334: Brush off loose particles from skin. Immerse in cool water/wrap in wet bandages.  
P370+P378: In case of fire: Use dry chemical, soda ash, lime or sand to extinguish.  
P402+P404: Store in a dry place. Store in a closed container.  
P501: Dispose of contents/container to a licensed chemical disposal agency in accordance with local/regional/national regulations.

Ca Prop 65 - This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm.

**Section 3 Composition / Information on Ingredients**

Chemical Name	CAS #	%	EINECS
Calcium carbide	75-20-7	65-85%	200-848-3
Calcium oxide	1305-78-8	10-30%	215-138-9

**Section 4 First Aid Measures**

**INGESTION:** MAY BE HARMFUL IF SWALLOWED. Call physician or Poison Control Center immediately. Induce vomiting only if advised by appropriate medical personnel. Never give anything by mouth to an unconscious person.

**INHALATION:** MAY BE HARMFUL IF INHALED. MAY CAUSE RESPIRATORY TRACT IRRITATION. Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

**EYE CONTACT:** MAY CAUSE IRRITATION AND/OR BURNS. Check for and remove contact lenses. Flush thoroughly with water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get immediate medical attention.

**SKIN ABSORPTION:** MAY BE HARMFUL IF ABSORBED THROUGH SKIN. MAY CAUSE IRRITATION AND/OR BURNS. Remove contaminated clothing. Flush thoroughly with mild soap and water. If irritation occurs, get medical attention.

**Section 5 Fire Fighting Measures**

**Suitable Extinguishing Media:** DO NOT use water to extinguish fire. Use dry chemical, soda ash, lime or sand to extinguish.

**Protective Actions for Fire-fighters:** In fire conditions, wear a NIOSH/MSHA-approved self-contained breathing apparatus and full protective gear.

**Specific Hazards:** During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Contact with water liberates extremely flammable gases. Dry Calcium carbide by itself presents no fire or explosion hazard, however, in contact with water, carbide evolves highly flammable and explosive acetylene gas. The acetylene generated from moisture-carbide reactions is highly flammable with a low ignition temperature (305°C).

**Section 6 Accidental Release Measures**

**Personal Precautions:** Evacuate personnel to safe area. Use proper personal protective equipment as indicated in Section 8. Provide adequate ventilation.

**Environmental Precautions:** Avoid runoff into storm sewers and ditches which lead to waterways.

**Containment and Cleanup:** Recover for reuse if not contaminated. Remove all sources of ignition. Sweep or vacuum up and place in a suitable container for proper disposal. Wash spill area with soap and water.

**Precautions for Safe Handling:** Read label on container before using. Do not wear contact lenses when working with chemicals. Keep out of reach of children. Avoid contact with eyes, skin and clothing. Do not inhale dusts. Use with adequate ventilation. Avoid ingestion. Wash thoroughly after handling. Remove and wash clothing before reuse.

**Conditions for Safe Storage:** Store in a cool, dry, well-ventilated area away from incompatible substances. Keep away from ignition sources. Keep away from water and moisture.

## Section 8 Exposure Controls / Personal Protection

Exposure Limits:	Chemical Name	ACGIH (TLV)	OSHA (PEL)	NIOSH (REL)
	Calcium carbide	Not listed	Not listed	Not listed

**Engineering controls:** Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower and fire extinguishing material. Personnel should wear safety glasses, goggles, or faceshield, lab coat or apron, appropriate protective gloves. Use adequate ventilation to keep airborne concentrations low.

**Respiratory protection:** None should be needed in normal laboratory handling at room temperatures. If dusty conditions prevail, work in fume hood or wear a NIOSH/MSHA-approved respirator.

## Section 9 Physical &amp; Chemical Properties

<b>Appearance:</b> Solid. Gray to blue-black lumps.	<b>Evaporation rate ( = 1):</b> Data not available	<b>Partition coefficient:</b> Data not available
<b>Odor:</b> Garlic-like odor.	<b>Flammability (solid/gas):</b> Data not available.	<b>Auto-ignition temperature:</b> Data not available
<b>Odor threshold:</b> Data not available.	<b>Explosion limits: Lower / Upper:</b> 2.5% / 82%	<b>Decomposition temperature:</b> Data not available.
<b>pH:</b> Data not available.	<b>Vapor pressure (mm Hg):</b> Data not available	<b>Viscosity:</b> Data not available.
<b>Melting / Freezing point:</b> 1700-2300°C (3092-4172°F)	<b>Vapor density (Air = 1):</b> Data not available	<b>Molecular formula:</b> CaC <sub>2</sub>
<b>Boiling point:</b> Data not available	<b>Relative density (Specific gravity):</b> 2.20 @ 20°C	<b>Molecular weight:</b> 64.10
<b>Flash point:</b> Data not available	<b>Solubility(ies):</b> Decomposes in water.	

## Section 10 Stability &amp; Reactivity

**Chemical stability:** Stable

**Hazardous polymerization:** Will not occur.

**Conditions to avoid:** Water, air, heat, sparks and/or flame.

**Incompatible materials:** Moisture from any source, water, unalloyed copper, silver, mercury.

**Hazardous decomposition products:** Contact with water produces heat, corrosive calcium hydroxide and acetylene, a highly flammable and explosive gas.

## Section 11 Toxicological Information

**Acute toxicity:** Data not available

**Skin corrosion/irritation:** Skin-human: corrosive-causes burns.

**Serious eye damage/irritation:** Eyes-human: Severe irritant.

**Respiratory or skin sensitization:** Non sensitizing

**Germ cell mutagenicity:** Data not available

**Carcinogenicity:** Data not available

**NTP:** No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

**IARC:** No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

**OSHA:** No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**Reproductive toxicity:** Data not available

**STOT-single exposure:** Data not available

**STOT-repeated exposure:** Data not available

**Aspiration hazard:** Data not available

**Potential health effects:**

**Inhalation:** Inhalation may cause cough, labored breathing, shortness of breath, sore throat.

**Ingestion:** Ingestion causes labored breathing, shock or collapse and symptoms same as inhalation.

**Skin:** Contact with skin causes redness, burns and pain.

**Eyes:** Contact with eyes causes redness, pain, blurred vision, severe deep burns.

**Signs and symptoms of exposure:** Exercise appropriate procedures to minimize potential hazards.

**Additional information:** RTECS #: EV9400000

## Section 12 Ecological Information

**Toxicity to fish:** No data available

**Toxicity to daphnia and other aquatic invertebrates:** No data available

**Toxicity to algae:** No data available

**Persistence and degradability:** No data available

**Bioaccumulative potential:** No data available

**Mobility in soil:** No data available

**PBT and vPvB assessment:** No data available

**Other adverse effects:** An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

## Section 13 Disposal Considerations

These disposal guidelines are intended for the disposal of catalog-size quantities only. Federal regulations may apply to empty container. State and/or local regulations may be different. Dispose of in accordance with all local, state and federal regulations or contract with a licensed chemical disposal agency.

## Section 14 Transport Information (US DOT / CANADA TDG)

**UN/NA number:** UN1402

**Shipping name:** Calcium carbide

**Hazard class:** 4.3

**Packing group:** II

**Reportable Quantity:** 10 lbs. (4.54 kg)


**Marine pollutant:** No

**Exceptions:** Limited quantity equal to or less than (0.5 kg) 1.1 lb.

**2012 ERG Guide #** 138

## Section 15 Regulatory Information

A chemical is considered to be listed if the CAS number for the anhydrous form is on the Inventory list.

Component	TSCA	CERLCA (RQ)	RCRA code	DSL	NDSL	WHMIS Classification
Calcium carbide	Listed	10 lbs. (4.54 kg)	Not listed	Listed	Not listed	 86; D2B

## Section 16 Additional Information

The information contained herein is furnished without warranty of any kind. Employers should use this information only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees. NTP: National Toxicology Program, IARC: International Agency for Research on Cancer, OSHA: Occupational Safety and Health Administration, STOT: Specific Target Organ Toxicity, SE: Single Exposure, RE: Repeated Exposure, ERG: Emergency Response Guidebook.

# FLINN SCIENTIFIC, INC.

## Safety Data Sheet (SDS)

SDS #: 195.00

Revision Date: March 13, 2014

### SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

#### Calcium Carbonate

Flinn Scientific, Inc. P.O. Box 219, Batavia, IL 60510 (800) 452-1261

CHEMTREC Emergency Phone Number: (800) 424-9300

Signal Word N/A

Pictograms

### SECTION 2 — HAZARDS IDENTIFICATION

This chemical is considered nonhazardous according to GHS classifications for the Hazard Communication Standard. Treat all laboratory chemicals with caution.

Although this material is considered to be nonhazardous, unpredictable reactions among chemicals are always possible. Prudent laboratory practices should be observed.

### SECTION 3 — COMPOSITION, INFORMATION ON INGREDIENTS

Component Name	CAS Number	Formula	Formula Weight	Concentration
Calcium carbonate	471-34-1	CaCO <sub>3</sub>	100.09	
Synonyms: Chalk; Dolomite; Limestone				

### SECTION 4 — FIRST AID MEASURES

Call a POISON CENTER or physician if you feel unwell.

**If inhaled:** Remove victim to fresh air and keep at rest in a position comfortable for breathing.

**If in eyes:** Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do so. Continue rinsing.

**If on skin:** Wash with plenty of water.

**If swallowed:** Rinse mouth. Call a POISON CENTER or physician if you feel unwell.

### SECTION 5 — FIRE FIGHTING MEASURES

Nonflammable, noncombustible solid.

When heated to decomposition, may emit toxic fumes.

**In case of fire:** Use a tri-class dry chemical fire extinguisher.

NFPA CODE

None  
established

### SECTION 6 — ACCIDENTAL RELEASE MEASURES

Sweep up the spill, place in a sealed bag or container, and dispose. Ventilate area and wash spill site after material pickup is complete. See Sections 8 and 13 for further information.

---

**SECTION 7 — HANDLING AND STORAGE**

---

Flinn Suggested Chemical Storage Pattern: Inorganic #4. Store with hydroxides, oxides, silicates and carbonates.  
Store in a cool, dry place.

---

**SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION**

---

Wear protective gloves, protective clothing, and eye protection. Wash hands thoroughly after handling.  
Exposure Guidelines: PEL 15 mg/m<sup>3</sup> (as total dust) (OSHA)

---

**SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES**

---

White powder. Odorless. Melting point: 825 °C (decomposes)  
Soluble: Acids but evolves carbon dioxide. Slightly in water. Specific gravity: 2.7

---

**SECTION 10 — STABILITY AND REACTIVITY**

---

Avoid contact with strong oxidizers, acids, magnesium, and aluminum.  
Shelf life: Excellent, if stored properly.

---

**SECTION 11 — TOXICOLOGICAL INFORMATION**

---

Acute effects: Irritant. ORL-RAT LD<sub>50</sub>: 6450 mg/kg  
Chronic effects: N.A. IHL-RAT LC<sub>50</sub>: N.A.  
Target organs: N.A. SKN-RBT LD<sub>50</sub>: N.A.

N.A. = Not available, not all health aspects of this substance have been fully investigated.

---

**SECTION 12 — ECOLOGICAL INFORMATION**

---

Data not yet available.

---

**SECTION 13 — DISPOSAL CONSIDERATIONS**

---

Please review all federal, state and local regulations that may apply before proceeding.  
Flinn Suggested Disposal Method #26a is one option.

---

**SECTION 14 — TRANSPORT INFORMATION**

---

Shipping name: Not regulated. Hazard class: N/A. UN number: N/A.

N/A = Not applicable

---

**SECTION 15 — REGULATORY INFORMATION**

---

TSCA-listed, EINECS-listed (207-439-9).

---

**SECTION 16 — OTHER INFORMATION**

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This Safety Data Sheet (SDS) is for guidance and is based upon information and tests believed to be reliable. Flinn Scientific, Inc. makes no guarantee of the accuracy or completeness of the data and shall not be liable for any damages relating thereto. The data is offered solely for your consideration, investigation, and verification. The data should not be confused with local, state, federal or insurance mandates, regulations, or requirements and CONSTITUTE NO WARRANTY. Any use of this data and information must be determined by the science instructor to be in accordance with applicable local, state or federal laws and regulations. The conditions or methods of handling, storage, use and disposal of the product(s) described are beyond the control of Flinn Scientific, Inc. and may be beyond our knowledge. FOR THIS AND OTHER REASONS, WE DO NOT ASSUME RESPONSIBILITY AND EXPRESSLY DISCLAIM LIABILITY FOR LOSS, DAMAGE OR EXPENSE ARISING OUT OF OR IN ANY WAY CONNECTED WITH THE HANDLING, STORAGE, USE OR DISPOSAL OF THIS PRODUCT(S).

Consult your copy of the *Flinn Science Catalog/Reference Manual* for additional information about laboratory chemicals.

**Revision Date:** March 13, 2014

## Section 1 Chemical Product and Company Information

Page E1 of E2



5100 West Henrietta Rd  
PO Box 92912  
Rochester, NY 14692-9012  
Tel: (800) 962-2660

**CHEMTREC 24 Hour Emergency**  
**Phone Number (800) 424-9300**  
For laboratory use only.  
Not for drug, food or household use.

Product	CALCIUM CARBONATE
Synonyms	Marble Chips / Boiling Chips / Marble Rocks / Limestone

## Section 2 Hazards Identification

This substance or mixture has not been classified as hazardous according to the Globally Harmonized System (GHS) of Classification and Labeling of Chemicals.

Signal word: WARNING  
Pictograms: GHS08  
Target organs: None known



GHS Classification:  
\*STOT-RE (Category 2)

GHS Label information: Hazard statement:  
\*H373: May cause damage to organs (*lungs*) through prolonged or repeated exposure (*inhalation*).

\* Respirable dust particles containing crystalline silica may be generated by crushing. There are no known hazards associated with this material when used as recommended.

## Precautionary statement:

P260: Do not breathe dust.  
P314: Get medical advice/attention if you feel unwell.  
P501: Dispose of contents/container to a licensed chemical disposal agency in accordance with local/regional/national regulations.

Ca Prop 65 - WARNING! This product contains a chemical known to the State of California to cause cancer, birth defects, or other reproductive harm.

## Section 3 Composition / Information on Ingredients

Chemical Name	CAS #	%	EINECS
Calcium carbonate	1317-65-3	≥ 99%	215-279-6
Quartz	14808-60-7	0.1-1.0%	238-878-4

## Section 4 First Aid Measures

**INGESTION:** Call physician or Poison Control Center immediately. Induce vomiting only if advised by appropriate medical personnel. Never give anything by mouth to an unconscious person.

**INHALATION:** PROLONGED INHALATION OF PARTICULATE DUST MAY BE HARMFUL. Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

**EYE CONTACT:** MAY CAUSE IRRITATION. Check for and remove contact lenses. Flush thoroughly with water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get immediate medical attention.

**SKIN ABSORPTION:** MAY CAUSE ABRASIONS. Remove contaminated clothing. Flush thoroughly with mild soap and water. If irritation occurs, get medical attention.

## Section 5 Fire Fighting Measures

**Suitable Extinguishing Media:** Product will not burn or support fire. Use any media suitable for extinguishing supporting fire

**Protective Actions for Fire-fighters:** In fire conditions, wear a NIOSH/MSHA-approved self-contained breathing apparatus and full protective gear. Use water spray to keep fire-exposed containers cool.

**Specific Hazards:** Limestone reacts with acids to release carbon dioxide.

## Section 6 Accidental Release Measures

**Personal Precautions:** Evacuate personnel to safe area. Use proper personal protective equipment as indicated in Section 8. Provide adequate ventilation.

**Environmental Precautions:** Avoid runoff into storm sewers and ditches which lead to waterways.

**Containment and Cleanup:** Sweep or vacuum up and place in a suitable container for proper disposal. Wash spill area with soap and water.

## Section 7

## Handling &amp; Storage

Page E2 of E2

**Precautions for Safe Handling:** Read label on container before using. Do not wear contact lenses when working with chemicals. Keep out of reach of children. Do not inhale dusts. Use with adequate ventilation. Avoid ingestion. Wash thoroughly after handling. Remove and wash clothing before reuse.

**Conditions for Safe Storage:** Store in a cool, dry, well-ventilated area.

## Section 8 Exposure Controls / Personal Protection

Exposure Limits:	Chemical Name	ACGIH (TLV)	OSHA (PEL)	NIOSH (REL)
	Particulates not otherwise classified	TWA: 5 mg/m <sup>3</sup> respirable fraction	None established	None established

**Engineering controls:** Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower and fire extinguishing material. Personnel should wear safety glasses, goggles, or faceshield, lab coat or apron, appropriate protective gloves. Use adequate ventilation to keep airborne concentrations low.

**Respiratory protection:** None should be needed in normal laboratory handling at room temperatures. If dusty conditions prevail, work in fume hood or wear a NIOSH/MSHA-approved respirator.

## Section 9 Physical &amp; Chemical Properties

<b>Appearance:</b> Solid, white stone chips.	<b>Evaporation rate ( = 1):</b> Not applicable	<b>Partition coefficient:</b> Not applicable
<b>Odor:</b> No odor.	<b>Flammability (solid/gas):</b> Data not available.	<b>Auto-ignition temperature:</b> Not applicable
<b>Odor threshold:</b> Data not available.	<b>Explosion limits: Lower / Upper:</b> Not flammable	<b>Decomposition temperature:</b> 825°C (1520°F)
<b>pH:</b> Data not available.	<b>Vapor pressure (mm Hg):</b> Data not available	<b>Viscosity:</b> Data not available.
<b>Melting / Freezing point:</b> Data not available	<b>Vapor density (Air = 1):</b> Data not available	<b>Molecular formula:</b> CaCO <sub>3</sub>
<b>Boiling point:</b> Data not available	<b>Relative density (Specific gravity):</b> 2.85	<b>Molecular weight:</b> 100.09
<b>Flash point:</b> Not flammable	<b>Solubility(ies):</b> 0.001% @ 0°C in water	

## Section 10 Stability &amp; Reactivity

**Chemical stability:** Stable      **Hazardous polymerization:** Will not occur.

**Conditions to avoid:** Avoid contact with acids.

**Incompatible materials:** Reacts with acids to liberate carbon dioxide.

**Hazardous decomposition products:** Carbon dioxide.

## Section 11 Toxicological Information

**Acute toxicity:** Data not available  
**Skin corrosion/irritation:** Data not available  
**Serious eye damage/irritation:** Data not available  
**Respiratory or skin sensitization:** Data not available  
**Germ cell mutagenicity:** Data not available  
**Carcinogenicity:** Data not available  
 NTP: Known to be a human carcinogen (respirable). [crystalline silica]\*  
 IARC classified: Group 1: Carcinogenic to humans. [crystalline silica]\*  
 OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.  
**Reproductive toxicity:** Data not available  
**STOT-single exposure:** Data not available  
**STOT-repeated exposure:** Inhalation - May cause damage to organs through prolonged or repeated exposure. [crystalline silica]\*  
**Aspiration hazard:** Data not available  
**Potential health effects:**  
 Inhalation: Dust may cause congestion and irritation in nasal and respiratory passages.  
 Ingestion: Ingestion may cause gastrointestinal irritation and blockage.  
 Skin: May cause abrasions.  
 Eyes: May cause mild to severe irritation by abrasion with dust or chips.  
**Signs and symptoms of exposure:** Prolonged inhalation of particulate dust, may result in silicosis, a disabling pulmonary fibrosis characterized by fibrotic changes and miliary nodules in the lungs, a dry cough, shortness of breath, emphysema, decreased chest expansion, and increased susceptibility to tuberculosis.  
**Additional information:** RTECS #: FF9335000  
 \* Respirable dust particles containing crystalline silica may be generated by crushing. There are no known hazards associated with this material when used as recommended.

## Section 12 Ecological Information

**Toxicity to fish:** No data available  
**Toxicity to daphnia and other aquatic invertebrates:** No data available  
**Toxicity to algae:** No data available  
**Persistence and degradability:** No data available      **Bioaccumulative potential:** No data available  
**Mobility in soil:** No data available      **PBT and vPvB assessment:** No data available  
**Other adverse effects:** An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

## Section 13 Disposal Considerations

These disposal guidelines are intended for the disposal of catalog-size quantities only. Federal regulations may apply to empty container. State and/or local regulations may be different. Dispose of in accordance with all local, state and federal regulations or contract with a licensed chemical disposal agency.

## Section 14 Transport Information

**UN/NA number:** Not applicable      **Shipping name:** Not Regulated  
**Hazard class:** Not applicable      **Packing group:** Not applicable      **Reportable Quantity:** No      **Marine pollutant:** No  
**Exceptions:** Not applicable      **2012 ERG Guide #** Not applicable

## Section 15 Regulatory Information

A chemical is considered to be listed if the CAS number for the anhydrous form is on the Inventory list.

Component	TSCA	CERLCA (RQ)	RCRA code	DSL	NDSL	WHMIS Classification
Calcium carbonate	Listed	Not listed	Not listed	Not listed	Listed	(T) D2A

## Section 16 Additional Information

The information contained herein is furnished without warranty of any kind. Employers should use this information only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees. NTP: National Toxicology Program, IARC: International Agency for Research on Cancer, OSHA: Occupational Safety and Health Administration, STOT: Specific Target Organ Toxicity, SE: Single Exposure, RE: Repeated Exposure, ERG: Emergency Response Guidebook.

Revision Date: January 9, 2014

Supersedes: December 10, 2012



# FLINN SCIENTIFIC, INC.

## Safety Data Sheet (SDS)

SDS #: 196.00

Revision Date: March 21, 2014

### SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

#### Calcium Chloride

Flinn Scientific, Inc. P.O. Box 219, Batavia, IL 60510 (800) 452-1261

CHEMTREC Emergency Phone Number: (800) 424-9300

Signal Word **WARNING**

Pictograms



### SECTION 2 — HAZARDS IDENTIFICATION

Hazard class: Acute toxicity, oral (Category 4). Harmful if swallowed (H302). Do not eat, drink or smoke when using this product (P270).

Hazard class: Serious eye damage or irritation (Category 2A). Causes serious eye irritation (H319).

### SECTION 3 — COMPOSITION, INFORMATION ON INGREDIENTS

Component Name	CAS Number	Formula	Formula Weight	Concentration
Calcium chloride, anhydrous	10043-52-4	CaCl <sub>2</sub>	110.98	

### SECTION 4 — FIRST AID MEASURES

Call a POISON CENTER or physician if you feel unwell.

**If inhaled:** Remove victim to fresh air and keep at rest in a position comfortable for breathing.

**If in eyes:** Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do so. Continue rinsing (P305+P351+P338). **If eye irritation persists:** Get medical advice or attention (P337+P313).

**If on skin:** Rinse cautiously with water for several minutes (P351).

**If swallowed:** Rinse mouth. Contact a POISON CENTER or physician if you feel unwell.

### SECTION 5 — FIRE FIGHTING MEASURES

Nonflammable, noncombustible solid.

When heated to decomposition, may emit toxic fumes.

**In case of fire:** Use a tri-class dry chemical fire extinguisher.

**NFPA Code**

None  
established

### SECTION 6 — ACCIDENTAL RELEASE MEASURES

Sweep up the spill, place in a sealed bag or container, and dispose. Ventilate area and wash spill site after material pickup is complete. See Sections 8 and 13 for further information.

---

**SECTION 7 — HANDLING AND STORAGE**

---

Flinn Suggested Chemical Storage Pattern: Inorganic #2. Store with acetates, halides, sulfates, sulfites, thiosulfates and phosphates. Store in a cool, dry place. Hygroscopic. Store in Flinn Chem-Saf™ bag.

---

**SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION**

---

Wear protective gloves, protective clothing, and eye protection (P280). Wash hands thoroughly after handling (P264).

---

**SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES**

---

White powder, crystals, or flakes. Odorless.

Boiling point: 1670 °C

Soluble: Water and alcohol. Liberates heat in water.

Melting point: 772 °C

Specific gravity: 2.15

---

**SECTION 10 — STABILITY AND REACTIVITY**

---

Avoid contact with strong acids.

Shelf life: Fair to poor, hygroscopic. See Section 7 for further information.

---

**SECTION 11 — TOXICOLOGICAL INFORMATION**

---

Acute effects: Irritant.

ORL-RAT LD<sub>50</sub>: 1000 mg/kg

Chronic effects: N.A.

IHL-RAT LC<sub>50</sub>: N.A.

Target organs: N.A.

SKN-RBT LD<sub>50</sub>: N.A.

N.A. = Not available, not all health aspects of this substance have been fully investigated.

---

**SECTION 12 — ECOLOGICAL INFORMATION**

---

Data not yet available.

---

**SECTION 13 — DISPOSAL CONSIDERATIONS**

---

Please review all federal, state and local regulations that may apply before proceeding.

Flinn Suggested Disposal Method #26a is one option.

---

**SECTION 14 — TRANSPORT INFORMATION**

---

Shipping name: Not regulated. Hazard class: N/A. UN number: N/A.

N/A = Not applicable

---

**SECTION 15 — REGULATORY INFORMATION**

---

TSCA-listed, EINECS-listed (233-140-8).

---

**SECTION 16 — OTHER INFORMATION**

---

This Safety Data Sheet (SDS) is for guidance and is based upon information and tests believed to be reliable. Flinn Scientific, Inc. makes no guarantee of the accuracy or completeness of the data and shall not be liable for any damages relating thereto. The data is offered solely for your consideration, investigation, and verification. The data should not be confused with local, state, federal or insurance mandates, regulations, or requirements and CONSTITUTE NO WARRANTY. Any use of this data and information must be determined by the science instructor to be in accordance with applicable local, state or federal laws and regulations. The conditions or methods of handling, storage, use and disposal of the product(s) described are beyond the control of Flinn Scientific, Inc. and may be beyond our knowledge. FOR THIS AND OTHER REASONS, WE DO NOT ASSUME RESPONSIBILITY AND EXPRESSLY DISCLAIM LIABILITY FOR LOSS, DAMAGE OR EXPENSE ARISING OUT OF OR IN ANY WAY CONNECTED WITH THE HANDLING, STORAGE, USE OR DISPOSAL OF THIS PRODUCT(S).

Consult your copy of the *Flinn Science Catalog/Reference Manual* for additional information about laboratory chemicals.

**Revision Date:** March 21, 2014



# Fisher Scientific

Part of Thermo Fisher Scientific

## SAFETY DATA SHEET

Creation Date 14-Aug-2009

Revision Date 26-Feb-2014

Revision Number 1

**Product Name** Calcium chloride  
**Cat No. :** C77-212; C77-500; C614-3; C614-10; C614-500  
**Synonyms** Dowflake; Calpus; Caltac (Anhydrous; Pellets; Certified; Desiccant; 4-20 Mesh and Finer)  
**Recommended Use** Laboratory chemicals  
**Uses advised against** No Information available

### Details of the supplier of the safety data sheet

#### **Company**

Fisher Scientific  
One Reagent Lane  
Fair Lawn, NJ 07410  
Tel: (201) 796-7100

#### **Emergency Telephone Number**

CHEMTREC®, Inside the USA: 800-424-9300  
CHEMTREC®, Outside the USA: 001-703-527-3887

### Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Serious Eye Damage/Eye Irritation

Category 2

### Label Elements

#### **Signal Word**

Warning

#### **Hazard Statements**

Causes serious eye irritation



### **Precautionary Statements**

#### **Prevention**

Wash face, hands and any exposed skin thoroughly after handling  
Wear eye/face protection

**Inhalation**

Call a POISON CENTER or doctor/physician if you feel unwell

**Eyes**

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
If eye irritation persists: Get medical advice/attention.

**Storage**

Store in a well-ventilated place. Keep container tightly closed  
Store locked up

**Disposal**

Dispose of contents/container to an approved waste disposal plant

**Hazards not otherwise classified (HNOC)**

May form combustible dust concentrations in air

**Composition: PROPERTIES OF INGREDIENTS**

**Haz/Non-haz**

Component	CAS-No	Weight %
Calcium chloride	10043-52-4	>95

**Composition: PHYSICAL PROPERTIES**

<b>Eye Contact</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Obtain medical attention.
<b>Skin Contact</b>	Wash off immediately with plenty of water for at least 15 minutes. Get medical attention if symptoms occur..
<b>Inhalation</b>	Move to fresh air. If breathing is difficult, give oxygen. Get medical attention if symptoms occur..
<b>Ingestion</b>	Do not induce vomiting. Obtain medical attention.
<b>Most important symptoms/effects</b>	No information available
<b>Notes to Physician</b>	Treat symptomatically.

**Composition: STABILITY**

<b>Suitable Extinguishing Media</b>	Substance is nonflammable; use agent most appropriate to extinguish surrounding fire..
<b>Unsuitable Extinguishing Media</b>	No information available.
<b>Flash Point</b>	No information available.
<b>Method -</b>	No information available.
<b>Autoignition Temperature</b>	No information available.
<b>Explosion Limits</b>	
<b>Upper</b>	No data available
<b>Lower</b>	No data available
<b>Sensitivity to mechanical impact</b>	No information available.
<b>Sensitivity to static discharge</b>	No information available.

**Specific Hazards Arising from the Chemical**

Non-combustible, substance itself does not burn but may decompose upon heating to produce corrosive and/or toxic fumes.

**Hazardous Combustion Products** Hydrogen chloride gas, Chlorine.

**Protective Equipment and Precautions for Firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

**NFPA**

<b>Health</b> 2	<b>Flammability</b> 0	<b>Instability</b> 1	<b>Physical hazards</b> N/A
--------------------	--------------------------	-------------------------	--------------------------------

<b>Personal Precautions</b>	Ensure adequate ventilation. Use personal protective equipment. Avoid dust formation.
<b>Environmental Precautions</b>	Should not be released into the environment. See Section 12 for additional ecological information.
<b>Methods for Containment and Clean Up</b>	Sweep up or vacuum up spillage and collect in suitable container for disposal. Avoid dust formation.

<b>Handling</b>	Wear personal protective equipment. Ensure adequate ventilation. Do not get in eyes, on skin, or on clothing. Avoid ingestion and inhalation. Avoid dust formation.
<b>Storage</b>	Keep containers tightly closed in a dry, cool and well-ventilated place.

**Exposure Guidelines**

Component	Quebec	Mexico OEL (TWA)	Ontario TWAEV
Calcium chloride			TWA: 5 mg/m <sup>3</sup>

**Engineering Measures** Ensure that eyewash stations and safety showers are close to the workstation location. Ensure adequate ventilation, especially in confined areas.

**Personal Protective Equipment**

<b>Eye/face Protection</b>	Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.
<b>Skin and body protection</b>	Wear appropriate protective gloves and clothing to prevent skin exposure.
<b>Respiratory Protection</b>	Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.
<b>Hygiene Measures</b>	Handle in accordance with good industrial hygiene and safety practice

<b>Physical State</b>	Solid
<b>Appearance</b>	Beige
<b>Odor</b>	odorless
<b>Odor Threshold</b>	No information available.
<b>pH</b>	8-10 100 g/L aq.sol.
<b>Melting Point/Range</b>	782°C / 1439.6°F

**Physical and Chemical Properties**

<b>Boiling Point/Range</b>	>1600°C / >2912°F@ 760 mmHg
<b>Flash Point</b>	No information available.
<b>Evaporation Rate</b>	No information available.
<b>Flammability (solid,gas)</b>	No information available.
<b>Flammability or explosive limits</b>	
<b>Upper</b>	No data available
<b>Lower</b>	No data available
<b>Vapor Pressure</b>	No information available.
<b>Vapor Density</b>	No information available.
<b>Relative Density</b>	No information available.
<b>Solubility</b>	Soluble in water
<b>Partition coefficient; n-octanol/water</b>	No data available
<b>Autoignition Temperature</b>	No information available.
<b>Decomposition temperature</b>	No information available.
<b>Viscosity</b>	No information available.
<b>Molecular Formula</b>	Ca Cl <sub>2</sub>
<b>Molecular Weight</b>	110.99

**Stability and Reactivity**

<b>Reactive Hazard</b>	None known, based on information available.
<b>Stability</b>	Stable under recommended storage conditions. Hygroscopic.
<b>Conditions to Avoid</b>	Incompatible products. Exposure to moist air or water. Excess heat. Avoid dust formation.
<b>Incompatible Materials</b>	Strong oxidizing agents, Metals
<b>Hazardous Decomposition Products</b>	Hydrogen chloride gas, Chlorine
<b>Hazardous Polymerization</b>	Hazardous polymerization does not occur.
<b>Hazardous Reactions</b>	None under normal processing.

**Toxicological Information**

**Acute Toxicity**

**Component Information**

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Calcium chloride	1000 mg/kg ( Rat )	2630 mg/kg ( Rat )	Not listed

**Toxicologically Synergistic Products** No information available.

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Irritation** Severe eye irritant

**Sensitization** No information available.

**Carcinogenicity** The table below indicates whether each agency has listed any ingredient as a carcinogen

Component	CAS-No	IARC	NTP	ACGIH	OSHA	Mexico
Calcium chloride	10043-52-4	Not listed	Not listed	Not listed	Not listed	Not listed

<b>Mutagenic Effects</b>	Mutagenic effects have occurred in experimental animals.
<b>Reproductive Effects</b>	No information available.
<b>Developmental Effects</b>	No information available.
<b>Teratogenicity</b>	No information available.
<b>STOT - single exposure</b>	None known.
<b>STOT - repeated exposure</b>	None known.
<b>Aspiration hazard</b>	No information available.
<b>Symptoms / effects, both acute and delayed</b>	No information available.
<b>Endocrine Disruptor Information</b>	No information available
<b>Other Adverse Effects</b>	Tumorigenic effects have been reported in experimental animals.. See actual entry in RTECS for complete information.

**Ecotoxicity**

Component	Freshwater Algae	Freshwater Fish	Microtox	Water Flea
Calcium chloride	Not listed	Lepomis macrochirus: LC50: 10650 mg/L/96h	Not listed	EC50: 52 mg/L/48h

<b>Persistence and Degradability</b>	No information available.
<b>Bioaccumulation/ Accumulation</b>	No information available
<b>Mobility</b>	No information available

**Waste Disposal Methods** Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

<b>DOT</b>	Not regulated
<b>TDG</b>	Not regulated
<b>IATA</b>	Not regulated
<b>IMDG/IMO</b>	Not regulated

**International Inventories**

Component	TSCA	DSL	NDSL	EINECS	ELINCS	NLP	PICCS	ENCS	AICS	CHINA	KECL

Calcium chloride	X	X	-	233-140-8	-		X	X	X	X	X
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**Legend:**

X - Listed

E - Indicates a substance that is the subject of a Section 5(e) Consent order under TSCA.

F - Indicates a substance that is the subject of a Section 5(f) Rule under TSCA.

N - Indicates a polymeric substance containing no free-radical initiator in its inventory name but is considered to cover the designated polymer made with any free-radical initiator regardless of the amount used.

P - Indicates a commenced PMN substance

R - Indicates a substance that is the subject of a Section 6 risk management rule under TSCA.

S - Indicates a substance that is identified in a proposed or final Significant New Use Rule

T - Indicates a substance that is the subject of a Section 4 test rule under TSCA.

XU - Indicates a substance exempt from reporting under the Inventory Update Rule, i.e. Partial Updating of the TSCA Inventory Data Base Production and Site Reports (40 CFR 710(B)).

Y1 - Indicates an exempt polymer that has a number-average molecular weight of 1,000 or greater.

Y2 - Indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants that comprises one of the eligibility criteria for the exemption rule.

**U.S. Federal Regulations**

TSCA 12(b) Not applicable

SARA 313 Not applicable

**SARA 311/312 Hazardous Categorization**

Acute Health Hazard	Yes
Chronic Health Hazard	No
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

Clean Water Act Not applicable

Clean Air Act Not applicable

OSHA Occupational Safety and Health Administration  
Not applicable

CERCLA  
Not Applicable

California Proposition 65 This product does not contain any Proposition 65 chemicals.

State Right-to-Know Not applicable

**U.S. Department of Transportation**

Reportable Quantity (RQ):	N
DOT Marine Pollutant	N
DOT Severe Marine Pollutant	N

**U.S. Department of Homeland Security**

This product does not contain any DHS chemicals.

**Other International Regulations**

Mexico - Grade No information available

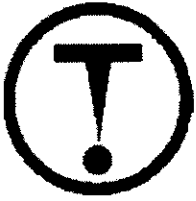
**Canada**

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.



WHMIS Hazard Class

D2B Toxic materials

**Prepared By**

Regulatory Affairs  
Thermo Fisher Scientific  
Email: EMSDS.RA@thermofisher.com

**Creation Date**

14-Aug-2009

**Revision Date**

26-Feb-2014

**Print Date**

26-Feb-2014

**Revision Summary**

This document has been updated to comply with the US OSHA HazCom 2012 Standard replacing the current legislation under 29 CFR 1910.1200 to align with the Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

**Disclaimer**

The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

**End of SDS**

# FLINN SCIENTIFIC, INC.

## Safety Data Sheet (SDS)

SDS #: 197.00

Revision Date: February 6, 2014

### SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

#### Calcium Chloride Solution

Flinn Scientific, Inc. P.O. Box 219, Batavia, IL 60510 (800) 452-1261

CHEMTREC Emergency Phone Number: (800) 424-9300

Signal Word N/A

Pictograms

### SECTION 2 — HAZARDS IDENTIFICATION

This chemical is considered nonhazardous according to GHS classifications for the Hazard Communication Standard. Treat all laboratory chemicals with caution.

Although this material is considered to be nonhazardous, unpredictable reactions among chemicals are always possible. Prudent laboratory practices should be observed.

### SECTION 3 — COMPOSITION, INFORMATION ON INGREDIENTS

Component Name	CAS Number	Formula	Formula Weight	Concentration
Calcium chloride dihydrate	10035-04-8	CaCl <sub>2</sub> ·2H <sub>2</sub> O	147.02	<15%
Water	7732-18-5	H <sub>2</sub> O	18.00	85-99%

### SECTION 4 — FIRST AID MEASURES

Call a POISON CENTER or physician if you feel unwell.

**If inhaled:** Remove victim to fresh air and keep at rest in a position comfortable for breathing.

**If in eyes:** Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do so. Continue rinsing.

**If on skin:** Wash with plenty of water.

**If swallowed:** Rinse mouth. Call a POISON CENTER or physician if you feel unwell.

### SECTION 5 — FIRE FIGHTING MEASURES

Nonflammable, noncombustible solution.

**In case of fire:** Use a tri-class dry chemical fire extinguisher.

**NFPA CODE**  
None  
established

### SECTION 6 — ACCIDENTAL RELEASE MEASURES

Ventilate area. Contain the spill with sand or absorbent material and deposit in a sealed bag or container. See Sections 8 and 13 for further information.

**SECTION 7 — HANDLING AND STORAGE**

Flinn Suggested Chemical Storage Pattern: Inorganic #2. Store with acetates, halides, sulfates, sulfites, thiosulfates and phosphates.

**SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION**

Wear protective gloves, protective clothing, and eye protection. Wash hands thoroughly after handling.

**SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES**

Clear, colorless liquid. Odorless.

pH: ~5

**SECTION 10 — STABILITY AND REACTIVITY**

Shelf life: Good, if stored properly.

**SECTION 11 — TOXICOLOGICAL INFORMATION**

Acute effects: N.A.

ORL-RAT LD<sub>50</sub>: N.A.

Chronic effects: N.A.

IHL-RAT LC<sub>50</sub>: N.A.

Target organs: N.A.

SKN-RBT LD<sub>50</sub>: N.A.

N.A. = Not available, not all health aspects of this substance have been fully investigated.

**SECTION 12 — ECOLOGICAL INFORMATION**

Data not yet available.

**SECTION 13 — DISPOSAL CONSIDERATIONS**

Please review all federal, state and local regulations that may apply before proceeding.

Flinn Suggested Disposal Method #26b is one option.

**SECTION 14 — TRANSPORT INFORMATION**

Shipping name: Not regulated. Hazard class: N/A. UN number: N/A.

N/A = Not applicable

**SECTION 15 — REGULATORY INFORMATION**

Not listed.

**SECTION 16 — OTHER INFORMATION**

This Safety Data Sheet (SDS) is for guidance and is based upon information and tests believed to be reliable. Flinn Scientific, Inc. makes no guarantee of the accuracy or completeness of the data and shall not be liable for any damages relating thereto. The data is offered solely for your consideration, investigation, and verification. The data should not be confused with local, state, federal or insurance mandates, regulations, or requirements and CONSTITUTE NO WARRANTY. Any use of this data and information must be determined by the science instructor to be in accordance with applicable local, state or federal laws and regulations. The conditions or methods of handling, storage, use and disposal of the product(s) described are beyond the control of Flinn Scientific, Inc. and may be beyond our knowledge. FOR THIS AND OTHER REASONS, WE DO NOT ASSUME RESPONSIBILITY AND EXPRESSLY DISCLAIM LIABILITY FOR LOSS, DAMAGE OR EXPENSE ARISING OUT OF OR IN ANY WAY CONNECTED WITH THE HANDLING, STORAGE, USE OR DISPOSAL OF THIS PRODUCT(S).

Consult your copy of the *Flinn Science Catalog/Reference Manual* for additional information about laboratory chemicals.

Revision Date: February 6, 2014

# Safety Data Sheet

## Calcium Chloride, Anhydrous

**CAROLINA**<sup>®</sup>  
www.carolina.com

### Section 1 Product Description

**Product Name:** Calcium Chloride, Anhydrous  
**Recommended Use:** Science education applications  
**Synonyms:** Calcium Chloride, Granular, Pellets, Lumps  
**Distributor:** Carolina Biological Supply Company  
2700 York Road, Burlington, NC 27215  
1-800-227-1150  
**Chemical Information:** 800-227-1150 (8am-5pm (ET) M-F)  
**Chemtrec:** 800-424-9300 (Transportation Spill Response 24 hours)

### Section 2 Hazard Identification

Classification of the chemical in accordance with paragraph (d) of §1910.1200;

**WARNING**



Harmful if swallowed. Causes serious eye irritation.

**GHS Classification:**  
Serious Eye Damage/Eye Irritation Category 2A, Acute Toxicity - Oral Category 4

<b>Acute Toxicity Dermal Contains</b>	100 % of the mixture consists of ingredient(s) of unknown toxicity
<b>Acute Toxicity Inhalation Gas Contains</b>	100 % of the mixture consists of ingredient(s) of unknown toxicity
<b>Acute Toxicity Inhalation Vapor Contains</b>	100 % of the mixture consists of ingredient(s) of unknown toxicity
<b>Acute Toxicity Inhalation Dust/Mist Contains</b>	100 % of the mixture consists of ingredient(s) of unknown toxicity

### Section 3 Composition / Information on Ingredients

<u>Chemical Name</u>	<u>CAS #</u>	<u>%</u>
Calcium Chloride, Anhydrous	10043-52-4	100

### Section 4 First Aid Measures

#### Emergency and First Aid Procedures

**Inhalation:** In case of accident by inhalation: remove casualty to fresh air and keep at rest.  
**Eyes:** IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.  
**Skin Contact:** After contact with skin, wash immediately with plenty of water.  
**Ingestion:** IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

### Section 5 Firefighting Procedures

**Extinguishing Media:** Use alcohol foam, carbon dioxide, or water spray when fighting fires involving this material.  
**Fire Fighting Methods and Protection:** Firefighters should wear full protective equipment and NIOSH approved self-contained breathing apparatus.

# Safety Data Sheet

**Fire and/or Explosion Hazards:** Fire or heat may produce products of Calcium Oxide and Hydrochloric Acid and/or Chlorine gas.  
**Hazardous Combustion Products:** Hydrogen chloride, Calcium Oxides

## Section 6 Spill or Leak Procedures

**Steps to Take in Case Material Is Released or Spilled:** Exposure to the spilled material may be irritating or harmful. Follow personal protective equipment recommendations found in Section 8 of this SDS. Additional precautions may be necessary based on special circumstances created by the spill including; the material spilled, the quantity of the spill, the area in which the spill occurred. Also consider the expertise of employees in the area responding to the spill. Ventilate the contaminated area. Avoid the generation of dusts during clean-up. Prevent the spread of any spill to minimize harm to human health and the environment if safe to do so. Wear complete and proper personal protective equipment following the recommendation of Section 8 at a minimum. Dike with suitable absorbent material like granulated clay. Gather and store in a sealed container pending a waste disposal evaluation. Contain the discharged material. Do not allow the spilled product to enter public drainage system or open waterways.

## Section 7 Handling and Storage

**Handling:** Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves/protective clothing/eye protection/face protection. Leather clothing and shoes will be damaged. Keep away from oxidizing materials and strong acids. Moisture; Product is hygroscopic. Avoid contact with skin and eyes. After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of water.  
**Storage:** Keep container tightly closed in a cool, well-ventilated place.  
**Storage Code:** Green - general chemical storage

## Section 8 Protection Information

Chemical Name	ACGIH		OSHA PEL	
	(TWA)	(STEL)	(TWA)	(STEL)
No data available	N/A	N/A	N/A	N/A

### Control Parameters

**Engineering Measures:** No exposure limits exist for the constituents of this product. General room ventilation might be required to maintain operator comfort under normal conditions of use.  
**Personal Protective Equipment (PPE):** Lab coat, apron, eye wash, safety shower.  
**Respiratory Protection:** No respiratory protection required under normal conditions of use.  
**Eye Protection:** Wear chemical splash goggles when handling this product. Have an eye wash station available.  
**Skin Protection:** Avoid skin contact by wearing chemically resistant gloves, an apron and other protective equipment depending upon conditions of use. Inspect gloves for chemical break-through and replace at regular intervals. Clean protective equipment regularly. Wash hands and other exposed areas with mild soap and water before eating, drinking, and when leaving work.  
**Gloves:** Nitrile

## Section 9 Physical Data

<b>Formula:</b> CaCl <sub>2</sub>	<b>Vapor Pressure:</b> <0.005
<b>Molecular Weight:</b> 110.99	<b>Evaporation Rate (BuAc=1):</b> N/A
<b>Appearance:</b> Colorless to pale yellow Solid	<b>Vapor Density (Air=1):</b> N/A
<b>Odor:</b> None	<b>Specific Gravity:</b> 2.2
<b>Odor Threshold:</b> No data available	<b>Solubility in Water:</b> Soluble
<b>pH:</b> 8.0 - 9.0, conc: 35 % (solution)	<b>Log Pow (calculated):</b> No data available
<b>Melting Point:</b> Not established 772 C	<b>Autoignition Temperature:</b> No data available
<b>Boiling Point:</b> 815 C	<b>Decomposition Temperature:</b> No data available
<b>Flash Point:</b> No data available	<b>Viscosity:</b> No data available
<b>Flammable Limits in Air:</b> N/A	<b>Percent Volatile by Volume:</b> Negligible

## Section 10 Reactivity Data

# Safety Data Sheet

**Reactivity:** No data available  
**Chemical Stability:** Stable under normal conditions.  
**Conditions to Avoid:** Exposure to air. Keep lid tightly closed when not in use.  
**Incompatible Materials:** Bromine Trifluoride, Methyl Vinyl Ether, Strong acids, Zinc  
**Hazardous Decomposition Products:** Calcium Oxides, Hydrogen chloride  
**Hazardous Polymerization:** Will not occur

## Section 11 Toxicity Data

**Routes of Entry:** Inhalation, ingestion, eye or skin contact.  
**Symptoms (Acute):** Respiratory disorders  
**Delayed Effects:** No data available

### Acute Toxicity:

Chemical Name	CAS Number	Oral LD50	Dermal LD50	Inhalation LC50
Calcium Chloride, Anhydrous	10043-52-4	Oral LD50 Rabbit 1384 mg/kg	Not determined	Not determined

### Carcinogenicity:

Chemical Name	CAS Number	IARC	NTP	OSHA
No data available	10043-52-4	Not listed	Not listed	Not listed

### Chronic Effects:

**Mutagenicity:** No evidence of a mutagenic effect.  
**Teratogenicity:** No evidence of a teratogenic effect (birth defect).  
**Sensitization:** No evidence of a sensitization effect.  
**Reproductive:** No evidence of negative reproductive effects.  
**Target Organ Effects:**  
**Acute:** See Section 2  
**Chronic:** Tumorigenic data cited., Not listed as a carcinogen by IARC, NTP or OSHA.

## Section 12 Ecological Data

**Overview:** Slight ecological hazard. In high concentrations, this product may be dangerous to plants and/or wildlife.  
**Mobility:** No data  
**Persistence:** No data  
**Bioaccumulation:** No data  
**Degradability:** No data  
**Other Adverse Effects:** No data

Chemical Name	CAS Number	Eco Toxicity
Calcium Chloride, Anhydrous	10043-52-4	96 HR LC50 LEPOMIS MACROCHIRUS 10650 MG/L [STATIC] 48 HR LC50 DAPHNIA MAGNA 2400 MG/L

## Section 13 Disposal Information

**Disposal Methods:** Dispose in accordance with all applicable Federal, State and Local regulations. Always contact a permitted waste disposer (TSD) to assure compliance.  
**Waste Disposal Code(s):** Not Determined

## Section 14 Transport Information

**Ground - DOT Proper Shipping Name:** Not a DOT controlled material  
**Air - IATA Proper Shipping Name:** Not regulated for air transport by IATA.

## Section 15 Regulatory Information

**TSCA Status:** All components in this product are on the TSCA Inventory.

# Safety Data Sheet

Chemical Name	CAS Number	§ 313 Name	§ 304 RQ	CERCLA RQ	§ 302 TPQ	CAA 112(2) TQ
No data available	10043-52-4	No	No	No	No	No

## Section 16 Additional Information

Revised: 09/03/2014

Replaces: 09/03/2014

Printed: 09-11-2014

The information provided in this (Material) Safety Data Sheet represents a compilation of data drawn directly from various sources available to us. Carolina Biological Supply makes no representation or guarantee as to the suitability of this information to a particular application of the substance covered in the (Material) Safety Data Sheet.

### Glossary

ACGIH	American Conference of Governmental Industrial Hygienists	NTP	National Toxicology Program
CAS	Chemical Abstract Service Number	OSHA	Occupational Safety and Health Administration
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act	PEL	Permissible Exposure Limit
DOT	U.S. Department of Transportation	ppm	Parts per million
IARC	International Agency for Research on Cancer	RCRA	Resource Conservation and Recovery Act
N/A	Not Available	SARA	Superfund Amendments and Reauthorization Act
		TLV	Threshold Limit Value
		TSCA	Toxic Substances Control Act
		IDLH	Immediately dangerous to life and health

**Section 1 Chemical Product and Company Information**


5100 West Henrietta Rd  
PO Box 92912  
Rochester, NY 14692-9012  
Tel: (800) 962-2660

**CHEMTREC 24 Hour Emergency**  
**Phone Number (800) 424-9300**  
For laboratory use only.  
Not for drug, food or household use.

**Product:** CALCIUM CHLORIDE, ANHYDROUS

**Synonyms:** N/A

**Section 2 Hazards Identification**

**Signal word:** WARNING

**Pictograms:** GHS07

**Target organs:** None known



**GHS Classification:**

Eye irritation (Category 2A)

**GHS Label information: Hazard statement:**

H319: Causes serious eye irritation.

**Precautionary statement:**

P264: Wash hands thoroughly after handling.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

P337+P313: If eye irritation persists: Get medical attention.

Ca Prop 65 - This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm.

**Section 3 Composition / Information on Ingredients**

Chemical Name	CAS #	%	EINECS
Calcium chloride	10043-52-4	>91.0%	233-140-8
Water	7732-18-5	4.5%	231-791-2
Potassium chloride	7447-40-7	2.5%	231-211-8
Sodium chloride	7647-14-5	1.5%	231-598-3
Strontium chloride	10476-85-4	0-1%	233-971-6

**Section 4 First Aid Measures**

**INGESTION:** MAY BE HARMFUL IF SWALLOWED. Call physician or Poison Control Center immediately. Induce vomiting only if advised by appropriate medical personnel. Never give anything by mouth to an unconscious person.

**INHALATION:** Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

**EYE CONTACT:** CAUSES SERIOUS EYE IRRITATION. Check for and remove contact lenses. Flush thoroughly with water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get immediate medical attention.

**SKIN ABSORPTION:** MAY CAUSE IRRITATION. Remove contaminated clothing. Flush thoroughly with mild soap and water. If irritation occurs, get medical attention.

**Section 5 Fire Fighting Measures**

**Suitable Extinguishing Media:** Use any media suitable for extinguishing supporting fire.

**Protective Actions for Fire-fighters:** In fire conditions, wear a NIOSH/MSHA-approved self-contained breathing apparatus and full protective gear. Use water spray to keep fire-exposed containers cool.

**Specific Hazards:** During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Heat is generated when product mixes with water.

**Section 6 Accidental Release Measures**

**Personal Precautions:** Evacuate personnel to safe area. Use proper personal protective equipment as indicated in Section 8. Provide adequate ventilation.

**Environmental Precautions:** Avoid runoff into storm sewers and ditches which lead to waterways.

**Containment and Cleanup:** Sweep or vacuum up and place in a suitable container for proper disposal. Wash spill area with soap and water.



**Section 7 Handling & Storage**

**Precautions for Safe Handling:** Read label on container before using. Do not wear contact lenses when working with chemicals. Keep out of reach of children. Avoid contact with eyes, skin and clothing. Do not inhale dusts. Use with adequate ventilation. Avoid ingestion. Wash thoroughly after handling. Remove and wash clothing before reuse.

**Conditions for Safe Storage:** Hygroscopic material. Store in a cool, dry, well-ventilated area away from incompatible substances.

**Section 8 Exposure Controls / Personal Protection**

Exposure Limits:	Chemical Name	ACGIH (TLV)	OSHA (PEL)	NIOSH (REL)
	Particulates not otherwise classified	None established	TWA: 15 mg/m <sup>3</sup> total dust	None established

**Engineering controls:** Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower and fire extinguishing material. Personnel should wear safety glasses, goggles, or faceshield, lab coat or apron, appropriate protective gloves. Use adequate ventilation to keep airborne concentrations low.

**Respiratory protection:** None should be needed in normal laboratory handling at room temperatures. If dusty conditions prevail, work in fume hood or wear a NIOSH/MSHA-approved respirator.

**Section 9 Physical & Chemical Properties**

<b>Appearance:</b> Solid. White pellets. <b>Odor:</b> No odor. <b>Odor threshold:</b> Data not available. <b>pH:</b> Data not available. <b>Melting / Freezing point:</b> 772°C (1422°F) <b>Boiling point:</b> Data not available <b>Flash point:</b> Not applicable	<b>Evaporation rate ( = 1):</b> Not applicable <b>Flammability (solid/gas):</b> Data not available. <b>Explosion limits: Lower / Upper:</b> Not applicable <b>Vapor pressure (mm Hg):</b> Negligible <b>Vapor density (Air = 1):</b> Data not available <b>Relative density (Specific gravity):</b> Data not available <b>Solubility(ies):</b> Soluble in water.	<b>Partition coefficient:</b> Not applicable <b>Auto-ignition temperature:</b> Not applicable <b>Decomposition temperature:</b> Data not available. <b>Viscosity:</b> Data not available. <b>Molecular formula:</b> CaCl <sub>2</sub> <b>Molecular weight:</b> 110.99
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**Section 10 Stability & Reactivity**

**Chemical stability:** Stable  
**Hazardous polymerization:** Will not occur.  
**Conditions to avoid:** Hygroscopic material. Avoid moisture.  
**Incompatible materials:** Heat is generated when mixed with water. Spattering and boiling can occur. Avoid contact with sulfuric acid. Corrosive when wet. Flammable hydrogen may be generated from contact with metals such as zinc and sodium.  
**Hazardous decomposition products:** None known.

**Section 11 Toxicological Information**

**Acute toxicity:** Oral-rat LD50: 2100 mg/kg ; Dermal-rabbit LD50: >5000 mg/kg  
**Skin corrosion/irritation:** Data not available  
**Serious eye damage/irritation:** Data not available  
**Respiratory or skin sensitization:** Data not available  
**Germ cell mutagenicity:** Data not available  
**Carcinogenicity:** Data not available  
 NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.  
 IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.  
 OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.  
**Reproductive toxicity:** Data not available  
**STOT-single exposure:** Data not available  
**STOT-repeated exposure:** Data not available  
**Aspiration hazard:** Data not available  
**Potential health effects:**  
 Inhalation: Dust may cause irritation to the upper respiratory tract (nose and throat).  
 Ingestion: Low toxicity if swallowed. However, large amounts may result in gastrointestinal irritation or ulceration.  
 Skin: Contact with skin may cause irritation and/or defolting on prolonged contact.  
 Eyes: Contact with eyes may cause severe irritation and/or corneal injury.  
**Signs and symptoms of exposure:** See Potential health effects above.  
**Additional information:** RTECS #: EV9810000

**Section 12 Ecological Information**

**Toxicity to fish:** Lepomis macrochirus (bluegill) LC50: 8,350-10,650 mg/L  
**Toxicity to daphnia and other aquatic invertebrates:** Daphnia magna (water flea), LC50: 759-3,005 mg/L  
**Toxicity to algae:** No data available  
**Persistence and degradability:** No data available  
**Bioaccumulative potential:** No data available  
**Mobility in soil:** No data available  
**PBT and vPvB assessment:** No data available  
**Other adverse effects:** An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

**Section 13 Disposal Considerations**

These disposal guidelines are intended for the disposal of catalog-size quantities only. Federal regulations may apply to empty container. State and/or local regulations may be different. Dispose of in accordance with all local, state and federal regulations or contract with a licensed chemical disposal agency.

**Section 14 Transport Information**

**UN/NA number:** Not applicable  
**Shipping name:** Not Regulated  
**Hazard class:** Not applicable  
**Packing group:** Not applicable  
**Reportable Quantity:** No  
**Marine pollutant:** No  
**Exceptions:** Not applicable  
**2012 ERG Guide #:** Not applicable

**Section 15 Regulatory Information**

A chemical is considered to be listed if the CAS number for the anhydrous form is on the Inventory list.

Component	TSCA	CERLCA (RQ)	RCRA code	DSL	NDSL	WHMIS Classification
Calcium chloride	Listed	Not listed	Not listed	Listed	Not listed	D2B

**Section 16 Additional Information**

The information contained herein is furnished without warranty of any kind. Employers should use this information only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees. NTP: National Toxicology Program, IARC: International Agency for Research on Cancer, OSHA: Occupational Safety and Health Administration, STOT: Specific Target Organ Toxicity, SE: Single Exposure, RE: Repeated Exposure, ERG: Emergency Response Guidebook.

# FLINN SCIENTIFIC, INC.

## Safety Data Sheet (SDS)

SDS #: 199.00

Revision Date: March 24, 2014

### SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

#### Calcium Hydroxide

Flinn Scientific, Inc. P.O. Box 219, Batavia, IL 60510 (800) 452-1261

CHEMTREC Emergency Phone Number: (800) 424-9300

Signal Word **WARNING**

Pictograms



### SECTION 2 — HAZARDS IDENTIFICATION

Hazard class: Skin and serious eye damage, corrosion or irritation (Category 2, 2A). Causes skin and serious eye irritation (H315+H319).

Hazard class: Specific target organ toxicity, single exposure; respiratory tract irritation (Category 3). May cause respiratory irritation (H335). Avoid breathing dust or fumes (P261).

### SECTION 3 — COMPOSITION, INFORMATION ON INGREDIENTS

Component Name	CAS Number	Formula	Formula Weight	Concentration
Calcium hydroxide	1305-62-0	Ca(OH) <sub>2</sub>	74.10	
Synonyms: Slaked lime; Calcium hydrate				

### SECTION 4 — FIRST AID MEASURES

Call a POISON CENTER or physician if you feel unwell (P312).

**If inhaled:** Remove victim to fresh air and keep at rest in a position comfortable for breathing (P304+P340).

**If in eyes:** Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do so. Continue rinsing (P305+P351+P338). **If eye irritation persists:** Get medical advice or attention (P337+P313).

**If on skin:** Wash with plenty of water (P302+P352). **If skin irritation occurs:** Get medical advice or attention (P332+P313).

**If swallowed:** Rinse mouth. Call a POISON CENTER or physician if you feel unwell.

### SECTION 5 — FIRE FIGHTING MEASURES

Nonflammable, noncombustible solid.

When heated to decomposition, may emit toxic fumes.

**In case of fire:** Use a tri-class dry chemical fire extinguisher.

**NFPA CODE**  
None  
established

### SECTION 6 — ACCIDENTAL RELEASE MEASURES

Sweep up the spill, place in a sealed bag or container, and dispose. Ventilate area and wash spill site after material pickup is complete. See Sections 8 and 13 for further information.

**SECTION 7 — HANDLING AND STORAGE**

Flinn Suggested Chemical Storage Pattern: Inorganic #4. Store with hydroxides, oxides, silicates and carbonates. Store in a cool, dry place. Store in a Flinn Chem-Saf™ bag. Keep container tightly closed (P233). Use only in a hood or well-ventilated area (P271).

**SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION**

Wear protective gloves, protective clothing, and eye protection (P280). Wash hands thoroughly after handling (P264). Use only in a hood or well-ventilated area (P271).

Exposure guidelines: PEL 15 mg/m<sup>3</sup> (as total dust) (OSHA); TLV 5 mg/m<sup>3</sup> (ACGIH)

**SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES**

White powder. Odorless.

Soluble: Acids and some organic liquids. Slightly in water.

Melting point: Loses water at 580 °C

pH of water solution (25%) 12.4.

Specific gravity: 2.34

**SECTION 10 — STABILITY AND REACTIVITY**

Avoid contact with strong acids, maleic anhydride, and nitro compounds.

Shelf life: Fair to poor. Absorbs carbon dioxide from air. See Section 7 for further information.

**SECTION 11 — TOXICOLOGICAL INFORMATION**

Acute effects: Corrosive.

Chronic effects: N.A.

Target organs: N.A.

ORL-RAT LD<sub>50</sub>: 7340 mg/kg

IHL-RAT LC<sub>50</sub>: N.A.

SKN-RBT LD<sub>50</sub>: N.A.

N.A. = Not available, not all health aspects of this substance have been fully investigated.

**SECTION 12 — ECOLOGICAL INFORMATION**

Data not yet available.

**SECTION 13 — DISPOSAL CONSIDERATIONS**

Please review all federal, state and local regulations that may apply before proceeding.

Flinn Suggested Disposal Method #10 is one option.

**SECTION 14 — TRANSPORT INFORMATION**

Shipping name: Not regulated. Hazard class: N/A. UN number: N/A.

N/A = Not applicable

**SECTION 15 — REGULATORY INFORMATION**

TSCA-listed, EINECS-listed (215-137-3), RCRA code D002.

**SECTION 16 — OTHER INFORMATION**

This Safety Data Sheet (SDS) is for guidance and is based upon information and tests believed to be reliable. Flinn Scientific, Inc. makes no guarantee of the accuracy or completeness of the data and shall not be liable for any damages relating thereto. The data is offered solely for your consideration, investigation, and verification. The data should not be confused with local, state, federal or insurance mandates, regulations, or requirements and CONSTITUTE NO WARRANTY. Any use of this data and information must be determined by the science instructor to be in accordance with applicable local, state or federal laws and regulations. The conditions or methods of handling, storage, use and disposal of the product(s) described are beyond the control of Flinn Scientific, Inc. and may be beyond our knowledge. FOR THIS AND OTHER REASONS, WE DO NOT ASSUME RESPONSIBILITY AND EXPRESSLY DISCLAIM LIABILITY FOR LOSS, DAMAGE OR EXPENSE ARISING OUT OF OR IN ANY WAY CONNECTED WITH THE HANDLING, STORAGE, USE OR DISPOSAL OF THIS PRODUCT(S).

Consult your copy of the *Flinn Science Catalog/Reference Manual* for additional information about laboratory chemicals.

Revision Date: March 24, 2014

## Section 1 Chemical Product and Company Information

Page E1 of E2



5100 West Henrietta Rd  
PO Box 92912  
Rochester, NY 14692-9012  
Tel: (800) 962-2660

**CHEMTREC 24 Hour Emergency**  
**Phone Number (800) 424-9300**  
For laboratory use only.  
Not for drug, food or household use.

Product **CALCIUM METAL**  
Synonyms Calcium

## Section 2 Hazards Identification

Signal word: DANGER  
Pictograms: GHS02  
Target organs: None known



GHS Classification:  
Water reactive (Category 2)

GHS Label information: Hazard statement:  
H261: In contact with water releases flammable gas.

## Precautionary statement:

P223: Do not allow contact with water.  
P231+P232: Handle under inert gas. Protect from moisture.  
P280: Wear protective gloves/protective clothing/eye protection/face protection.  
P335+P334: Brush off loose particles from skin. Immerse in cool water/wrap in wet bandages.  
P370+P378: In case of fire: Use Class D extinguisher or smother with dry sand, dry clay, dry ground limestone or graphite to extinguish.  
P402+P404: Store in a dry place. Store in a closed container.  
P501: Dispose of contents/container to a licensed chemical disposal agency in accordance with local/regional/national regulations.

Ca Prop 65 - This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm.

## Section 3 Composition / Information on Ingredients

Chemical Name	CAS #	%	EINECS
Calcium	7440-70-2	98%	231-179-5

## Section 4 First Aid Measures

**INGESTION:** MAY BE HARMFUL IF SWALLOWED. Call physician or Poison Control Center immediately. Induce vomiting only if advised by appropriate medical personnel. Never give anything by mouth to an unconscious person.

**INHALATION:** MAY BE HARMFUL IF INHALED. MAY CAUSE RESPIRATORY TRACT IRRITATION. Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

**EYE CONTACT:** MAY CAUSE EYE IRRITATION. Check for and remove contact lenses. Flush thoroughly with water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get immediate medical attention.

**SKIN ABSORPTION:** MAY BE HARMFUL IF ABSORBED THROUGH SKIN. MAY CAUSE SKIN IRRITATION. Remove contaminated clothing. Flush thoroughly with mild soap and water. If irritation occurs, get medical attention.

## Section 5 Fire Fighting Measures

**Suitable Extinguishing Media:** DO NOT use water, foam or halogenated extinguishing agents or CO<sub>2</sub>. Use Class D extinguisher or smother with dry sand, dry clay, dry ground limestone or graphite to extinguish.

**Protective Actions for Fire-fighters:** In fire conditions, wear a NIOSH/MSHA-approved self-contained breathing apparatus and full protective gear. Use water spray to keep fire-exposed containers cool.

**Specific Hazards:** During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Calcium reacts with water and acids to release hydrogen. Heat of reaction may ignite evolved hydrogen. Avoid direct viewing of calcium fires as eye injury may result, use fire glasses. Powders form explosive mixtures with air which may be ignited by a spark.

## Section 6 Accidental Release Measures

**Personal Precautions:** Evacuate personnel to safe area. Use proper personal protective equipment as indicated in Section 8. Provide adequate ventilation.

**Environmental Precautions:** Avoid runoff into storm sewers and ditches which lead to waterways.

**Containment and Cleanup:** Recover for reuse if not contaminated. Remove all sources of ignition. Sweep or vacuum up and place in a suitable container for proper disposal. Wash spill area with soap and water.

**Section 7 Handling & Storage**

**Precautions for Safe Handling:** Read label on container before using. Do not wear contact lenses when working with chemicals. Keep out of reach of children. Avoid contact with eyes, skin and clothing. Do not inhale dusts. Use with adequate ventilation. Avoid ingestion. Wash thoroughly after handling. Remove and wash clothing before reuse.

**Conditions for Safe Storage:** Store in a cool, dry, well-ventilated area away from incompatible substances. Keep away from ignition sources. Avoid exposure to water and moisture.

**Section 8 Exposure Controls / Personal Protection**

Exposure Limits:	Chemical Name	ACGIH (TLV)	OSHA (PEL)	NIOSH (REL)
	Calcium	Not established	Not established	Not established

**Engineering controls:** Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower and fire extinguishing material. Personnel should wear safety glasses, goggles, or faceshield, lab coat or apron, appropriate protective gloves. Use adequate ventilation to keep airborne concentrations low.

**Respiratory protection:** None should be needed in normal laboratory handling at room temperatures. If dusty conditions prevail, work in fume hood or wear a NIOSH/MSHA-approved respirator.

**Section 9 Physical & Chemical Properties**

<b>Appearance:</b> Solid, silvery-gray metal.	<b>Evaporation rate ( = 1):</b> Data not available	<b>Partition coefficient:</b> Data not available
<b>Odor:</b> No odor.	<b>Flammability (solid/gas):</b> Data not available.	<b>Auto-ignition temperature:</b> Data not available
<b>Odor threshold:</b> Data not available.	<b>Explosion limits: Lower / Upper:</b> Data not available	<b>Decomposition temperature:</b> Data not available.
<b>pH:</b> Data not available.	<b>Vapor pressure (mm Hg):</b> 10 mm Hg @ 983°C	<b>Viscosity:</b> Data not available.
<b>Melting / Freezing point:</b> 842°C (1542°F)	<b>Vapor density (Air = 1):</b> Data not available	<b>Molecular formula:</b> Ca
<b>Boiling point:</b> 1440°C (4755°F)	<b>Relative density (Specific gravity):</b> 1.54	<b>Molecular weight:</b> 40.08
<b>Flash point:</b> Data not available	<b>Solubility(ies):</b> Reacts violently with water.	

**Section 10 Stability & Reactivity**

**Chemical stability:** Stable      **Hazardous polymerization:** Will not occur.

**Conditions to avoid:** Excessive temperatures, heat, sparks, open flame and other sources of ignition. Avoid contact with air and water. Avoid dispersion of dust in air.

**Incompatible materials:** Acids, halogens, alkali, metals, hydroxides, carbonates. Calcium will react with water and acids to release hydrogen.

**Hazardous decomposition products:** Hydrogen, calcium hydroxide, calcium oxide.

**Section 11 Toxicological Information**

**Acute toxicity:** Data not available  
**Skin corrosion/irritation:** Data not available  
**Serious eye damage/irritation:** Data not available  
**Respiratory or skin sensitization:** Data not available  
**Germ cell mutagenicity:** Data not available  
**Carcinogenicity:** Data not available  
 NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.  
 IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.  
 OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.  
**Reproductive toxicity:** Data not available  
**STOT-single exposure:** Data not available  
**STOT-repeated exposure:** Data not available  
**Aspiration hazard:** Data not available  
**Potential health effects:**  
 Inhalation: May be harmful if inhaled. May cause respiratory tract irritation.  
 Ingestion: May be harmful if swallowed.  
 Skin: May be harmful if absorbed through skin. May cause skin irritation.  
 Eyes: May cause eye irritation.  
**Signs and symptoms of exposure:** Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin. Cough, shortness of breath, headache, nausea. Exercise appropriate procedures to minimize potential hazards.  
**Additional information:** RTECS #: EV8040000

**Section 12 Ecological Information**

**Toxicity to fish:** No data available  
**Toxicity to daphnia and other aquatic invertebrates:** No data available  
**Toxicity to algae:** No data available  
**Persistence and degradability:** No data available      **Bioaccumulative potential:** No data available  
**Mobility in soil:** No data available      **PBT and vPvB assessment:** No data available  
**Other adverse effects:** An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

**Section 13 Disposal Considerations**



These disposal guidelines are intended for the disposal of catalog-size quantities only. Federal regulations may apply to empty container. State and/or local regulations may be different. Dispose of in accordance with all local, state and federal regulations or contract with a licensed chemical disposal agency.

**Section 14 Transport Information (US DOT / CANADA TDG)**

**UN/NA number:** UN1401      **Shipping name:** Calcium  
**Hazard class:** 4.3      **Packing group:** II      **Reportable Quantity:** 10 lbs (0.37 kg)      **Marine pollutant:** No  
**Exemptions:** Limited quantity equal to or less than (0.5 Kg) 1.1 lb.      **2012 ERG Guide #** 138

**Section 15 Regulatory Information**

A chemical is considered to be listed if the CAS number for the anhydrous form is on the inventory list.

Component	TSCA	CERLCA (RQ)	RCRA code	DSL	NDSL	WHMIS Classification
Calcium	Listed	10 lbs (0.37 kg)	D001 ; D003	Listed	Not listed	  B6 ; E

**Section 16 Additional Information**

The information contained herein is furnished without warranty of any kind. Employers should use this information only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees. NTP: National Toxicology Program, IARC: International Agency for Research on Cancer, OSHA: Occupational Safety and Health Administration, STOT: Specific Target Organ Toxicity, SE: Single Exposure, RE: Repeated Exposure, ERG: Emergency Response Guidebook.

## Section 1 Chemical Product and Company Information

Page E1 of E2



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Rochester, NY 14692-9012  
Tel: (800) 962-2660

**CHEMTREC 24 Hour Emergency**  
**Phone Number (800) 424-9300**  
For laboratory use only.  
Not for drug, food or household use.

<b>Product</b>	CALCIUM NITRATE, TETRAHYDRATE
<b>Synonyms</b>	Nitric Acid, Calcium(II) Salt / Calcium Nitrate, 4-Hydrate

## Section 2 Hazards Identification

Signal word: DANGER

Pictograms: GHS03 / GHS05 / GHS07

Target organs: Blood

**GHS Classification:**

Oxidizing solid (Category 3)

Acute toxicity, oral (Category 4)

Eye damage (Category 1)

**GHS Label information: Hazard statement:**

H272: May intensify fire; oxidizer.

H302: Harmful if swallowed.

H318: Causes serious eye damage.

**Precautionary statement:**

P210: Keep away from heat/sparks/open flames/hot surfaces. No smoking.

P220: Keep away from clothing/incompatible/combustible materials.

P221: Take any precaution to avoid mixing with combustibles and incompatible materials.

P264: Wash hands thoroughly after handling.

P270: Do not eat, drink or smoke when using this product.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

P370+P378: In case of fire: Use WATER ONLY to extinguish.

P301+P312: IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell.

P330: Rinse mouth.

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

P310: Immediately call a POISON CENTER or doctor.

P501: Dispose of contents/container to a licensed chemical disposal agency in accordance with local/regional/national regulations.

Ca Prop 65: This product does not contain any chemicals known to the State of California to cause cancer or reproductive toxicity.

## Section 3 Composition / Information on Ingredients

Chemical Name	CAS #	%	EINECS
Calcium nitrate	13477-34-4	100%	233-332-1

## Section 4 First Aid Measures

**INGESTION:** HARMFUL IF SWALLOWED. Call physician or Poison Control Center immediately. Induce vomiting only if advised by appropriate medical personnel. Never give anything by mouth to an unconscious person.

**INHALATION:** MAY BE HARMFUL IF INHALED. MAY CAUSE RESPIRATORY TRACT IRRITATION. Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

**EYE CONTACT:** CAUSES SERIOUS EYE DAMAGE. Check for and remove contact lenses. Flush thoroughly with water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get immediate medical attention.

**SKIN ABSORPTION:** MAY BE HARMFUL IF ABSORBED THROUGH SKIN. MAY CAUSE SKIN IRRITATION. Remove contaminated clothing. Flush thoroughly with mild soap and water. If irritation occurs, get medical attention.

## Section 5 Fire Fighting Measures

**Suitable Extinguishing Media:** Use water only. Do not use dry chemical or foams. CO<sub>2</sub> or Halon® may provide limited control.

**Protective Actions for Fire-fighters:** In fire conditions, wear a NIOSH/MSHA-approved self-contained breathing apparatus and full protective gear. Use water spray to keep fire-exposed containers cool.

**Specific Hazards:** During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Although not flammable, substance is a strong oxidizer which releases oxygen on heating, increasing the burn rate of any material with a flare-burning effect. It may cause re-ignition after a fire is extinguished.

## Section 6 Accidental Release Measures

**Personal Precautions:** Evacuate personnel to safe area. Use proper personal protective equipment as indicated in Section 8. Provide adequate ventilation.

**Environmental Precautions:** Avoid runoff into storm sewers and ditches which lead to waterways.

**Containment and Cleanup:** Recover for reuse if not contaminated. Remove all sources of ignition. Sweep or vacuum up and place in a suitable container for proper disposal. Wash spill area with soap and water.

**Section 7 Handling & Storage**

**Precautions for Safe Handling:** Read label on container before using. Do not wear contact lenses when working with chemicals. Keep out of reach of children. Avoid contact with eyes, skin and clothing. Do not inhale dusts. Use with adequate ventilation. Avoid ingestion. Wash thoroughly after handling. Remove and wash clothing before reuse.

**Conditions for Safe Storage:** Store in a cool, dry, well-ventilated area away from incompatible substances. Keep away from ignition sources.

**Section 8 Exposure Controls / Personal Protection**

Exposure Limits:	Chemical Name	ACGIH (TLV)	OSHA (PEL)	NIOSH (REL)
	Calcium nitrate	Not established	Not established	Not established

**Engineering controls:** Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower and fire extinguishing material. Personnel should wear safety glasses, goggles, or faceshield, lab coat or apron, appropriate protective gloves. Use adequate ventilation to keep airborne concentrations low.

**Respiratory protection:** None should be needed in normal laboratory handling at room temperatures. If dusty conditions prevail, work in fume hood or wear a NIOSH/MSHA-approved respirator.

**Section 9 Physical & Chemical Properties**

**Appearance:** Solid. White prills  
**Odor:** No odor  
**Odor threshold:** Data not available  
**pH:** Data not available  
**Melting / Freezing point:** 45°C (113°F)  
**Boiling point:** Decomposes  
**Flash point:** Data not available

**Evaporation rate ( = 1):** Data not available  
**Flammability (solid/gas):** Data not available  
**Explosion limits: Lower / Upper:** Data not available  
**Vapor pressure (mm Hg):** Negligible  
**Vapor density (Air = 1):** 8.17  
**Relative density (Specific gravity):** 2.36  
**Solubility(ies):** 121 g/100 ml water

**Partition coefficient:** Data not available  
**Auto-ignition temperature:** Data not available  
**Decomposition temperature:** Data not available  
**Viscosity:** Data not available  
**Molecular formula:** Ca(NO<sub>3</sub>)<sub>2</sub>·4H<sub>2</sub>O  
**Molecular weight:** 236.15

**Section 10 Stability & Reactivity**

**Chemical stability:** Stable

**Hazardous polymerization:** Will not occur.

**Conditions to avoid:** Keep away from combustible materials.

**Incompatible materials:** Ammonia, hydrozine and other reducing agents.

**Hazardous decomposition products:** Nitrogen oxides.

**Section 11 Toxicological Information**

**Acute toxicity:** Oral-rat LD50: 3900 mg/kg

**Skin corrosion/irritation:** Data not available

**Serious eye damage/irritation:** Eyes-rabbit - 500 mg/24 hour -Severe

**Respiratory or skin sensitization:** Data not available

**Germ cell mutagenicity:** Data not available

**Carcinogenicity:** Data not available

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Ca Prop 65: This product does not contain any chemicals known to the State of California to cause cancer or reproductive toxicity.

**Reproductive toxicity:** Data not available

**STOT-single exposure:** Data not available

**STOT-repeated exposure:** Data not available

**Aspiration hazard:** Data not available

**Potential health effects:**

Inhalation: Inhalation may cause cough and sore throat.

Ingestion: Ingestion may cause abdominal pain, blue lips, fingernails and skin, confusion, convulsions, dizziness, headache, nausea, unconsciousness.

Skin: Contact with skin may cause irritation and/or defatting on prolonged contact.

Eyes: Contact with eyes may cause redness and pain.

**Signs and symptoms of exposure:** Ingestion could cause effects on the blood. This may result in formation of methaemoglobin. The effects may be delayed. Medical observation is indicated. Exercise appropriate procedures to minimize potential hazards.

**Additional information: RTECS #:** Data not available

**Section 12 Ecological Information**

**Toxicity to fish:** No data available

**Toxicity to daphnia and other aquatic invertebrates:** No data available

**Toxicity to algae:** No data available

**Persistence and degradability:** No data available

**Bioaccumulative potential:** No data available

**Mobility in soil:** No data available

**PBT and vPvB assessment:** No data available

**Other adverse effects:** An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

**Section 13 Disposal Considerations**

These disposal guidelines are intended for the disposal of catalog-size quantities only. Federal regulations may apply to empty container. State and/or local regulations may be different. Dispose of in accordance with all local, state and federal regulations or contract with a licensed chemical disposal agency.

**Section 14 Transport Information (US DOT / CANADA TDG)**

**UN/NA number:** UN1454

**Shipping name:** Calcium nitrate

**Hazard class:** 5.1

**Packing group:** III


**Reportable Quantity:** No  
**2012 ERG Guide #** 140

**Marine pollutant:** No

**Exceptions:** Limited quantity equal to or less than 5 Kg

**Section 15 Regulatory Information**

A chemical is considered to be listed if the CAS number for the anhydrous form is on the Inventory list.

Component	TSCA	CERCLA (RQ)	RCRA code	DSL	NDSL	WHMIS Classification
Calcium nitrate	Listed	Not listed	D001	Listed	Not listed	 C

**Section 16 Additional Information**

The information contained herein is furnished without warranty of any kind. Employers should use this information only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees. NTP: National Toxicology Program, IARC: International Agency for Research on Cancer, OSHA: Occupational Safety and Health Administration, STOT: Specific Target Organ Toxicity, SE: Single Exposure, RE: Repeated Exposure, ERG: Emergency Response Guidebook.

## Section 1 Chemical Product and Company Information

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Tel: (800) 962-2660

**CHEMTREC 24 Hour Emergency**  
**Phone Number (800) 424-9300**  
For laboratory use only.  
Not for drug, food or household use.

<b>Product</b>	<b>CALCIUM SULFATE, ANHYDROUS, INDICATING</b>
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<b>Synonyms</b>	Drierite® Indicating / Anhydrous Gypsum
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## Section 2 Hazards Identification

Signal word: DANGER

Pictograms: GHS07 / GHS08 / GHS09

Target organs: None known



## GHS Classification:

Acute toxicity, oral (Category 5)

Skin sensitization (Category 1)

Respiratory sensitization (Category 1)

Mutagenicity (Category 2)

Carcinogenicity (Category 1B)

Reproductive toxicity (Category 1B)

Aquatic acute (Category 1)

Aquatic chronic (Category 1)

## GHS Label information: Hazard statement:

H303: May be harmful if swallowed.

H317: May cause an allergic skin reaction.

H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H341: Suspected of causing genetic defects.

H350: May cause cancer.

H360: May damage fertility or the unborn child.

H400: Very toxic to aquatic life.

H410: Very toxic to aquatic life with long lasting effects.

## Precautionary statement: None required

P201: Obtain special instructions before use.

P202: Do not handle until all safety precautions have been read and understood.

P261: Avoid breathing dust.

P272: Contaminated work clothing should not be allowed out of the workplace.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

P284: Wear respiratory protection.

P273: Avoid release to the environment.

P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P342+P311: If experiencing respiratory symptoms: Call a POISON CENTER or doctor.

P302+P352: IF ON SKIN: Wash with plenty of water and soap.

P333+P313: If skin irritation or rash occurs: Get medical attention.

P308+P313: IF exposed or concerned: Get medical attention.

P362+P364: Take off contaminated clothing and wash it before reuse.

P391: Collect spillage.

P405: Store locked up.

P501: Dispose of contents/container to a licensed chemical disposal agency in accordance with local/regional/national regulations.

Ca Prop 65: This product does not contain any chemicals known to the State of California to cause cancer or reproductive toxicity.

## Section 3 Composition / Information on Ingredients

Chemical Name	CAS #	%	EINECS
Calcium sulfate	7778-18-9	97%	231-900-3
Cobalt chloride	7646-79-9	3%	231-589-4

## Section 4 First Aid Measures

**INGESTION:** MAY BE HARMFUL IF SWALLOWED. Call physician or Poison Control Center immediately. Induce vomiting only if advised by appropriate medical personnel. Never give anything by mouth to an unconscious person.

**INHALATION:** MAY BE HARMFUL IF INHALED. MAY CAUSE RESPIRATORY TRACT IRRITATION. Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

**EYE CONTACT:** MAY CAUSE EYE IRRITATION. Check for and remove contact lenses. Flush thoroughly with water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get immediate medical attention.

**SKIN ABSORPTION:** MAY BE HARMFUL IF ABSORBED THROUGH SKIN. MAY CAUSE SKIN IRRITATION. Remove contaminated clothing. Flush thoroughly with mild soap and water. If irritation occurs, get medical attention.

## Section 5 Fire Fighting Measures

**Suitable Extinguishing Media:** Use any media suitable for extinguishing supporting fire.

**Protective Actions for Fire-fighters:** In fire conditions, wear a NIOSH/MSHA-approved self-contained breathing apparatus and full protective gear. Use water spray to keep fire-exposed containers cool.

**Specific Hazards:** During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

## Section 6 Accidental Release Measures

**Personal Precautions:** Evacuate personnel to safe area. Use proper personal protective equipment as indicated in Section 8. Provide adequate ventilation.

**Environmental Precautions:** Avoid runoff into storm sewers and ditches which lead to waterways.

**Containment and Cleanup:** Recover for reuse if not contaminated. Sweep or vacuum up and place in a suitable container for proper disposal. Wash spill area with soap and water.



**Section 7 Handling & Storage**

**Precautions for Safe Handling:** Read label on container before using. Do not wear contact lenses when working with chemicals. Keep out of reach of children. Avoid contact with eyes, skin and clothing. Do not inhale dusts. Use with adequate ventilation. Avoid ingestion. Wash thoroughly after handling. Remove and wash clothing before reuse.

**Conditions for Safe Storage:** Store in a cool, dry, well-ventilated area away from incompatible substances. Protect from moisture.

**Section 8 Exposure Controls / Personal Protection**

Exposure Limits:	Chemical Name	ACGIH (TLV)	OSHA (PEL)	NIOSH (REL)
	Calcium sulfate	TWA: 10 mg/m <sup>3</sup>	TWA: 15 mg/m <sup>3</sup> total dust	TWA: 10 mg/m <sup>3</sup> total dust

**Engineering controls:** Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower and fire extinguishing material. Personnel should wear safety glasses, goggles, or faceshield, lab coat or apron, appropriate protective gloves. Use adequate ventilation to keep airborne concentrations low.

**Respiratory protection:** None should be needed in normal laboratory handling at room temperatures. If dusty conditions prevail, work in fume hood or wear a NIOSH/MSHA-approved respirator.

**Section 9 Physical & Chemical Properties**

<b>Appearance:</b> Solid. Blue* crystals	<b>Evaporation rate ( = 1):</b> Data not available	<b>Partition coefficient:</b> Data not available
<b>Odor:</b> No odor	<b>Flammability (solid/gas):</b> Data not available	<b>Auto-ignition temperature:</b> Data not available
<b>Odor threshold:</b> Data not available	<b>Explosion limits: Lower / Upper:</b> Data not available	<b>Decomposition temperature:</b> Data not available
<b>pH:</b> Data not available	<b>Vapor pressure (mm Hg):</b> Negligible	<b>Viscosity:</b> Data not available
<b>Melting / Freezing point:</b> 1450°C (2642°F)	<b>Vapor density (Air = 1):</b> Data not available	<b>Molecular formula:</b> Mixture
<b>Boiling point:</b> Data not available	<b>Relative density (Specific gravity):</b> 2.32-2.96	<b>Molecular weight:</b> Mixture
<b>Flash point:</b> Data not available	<b>Solubility(ies):</b> 0.21 g/100 ml water @ 18.75°C	

**Section 10 Stability & Reactivity**

**Chemical stability:** Stable

**Hazardous polymerization:** Will not occur.

**Conditions to avoid:** Protect from moisture. Material will harden on exposure to moisture. \*Color changes to red after exposure to moisture, then back to blue after redrying.

**Incompatible materials:** Acids.

**Hazardous decomposition products:** Calcium oxides, sulfur oxides.

**Section 11 Toxicological Information**

**Acute toxicity:** Data not available

**Skin corrosion/irritation:** Data not available

**Serious eye damage/irritation:** Data not available

**Respiratory or skin sensitization:** Data not available

**Germ cell mutagenicity:** Data not available

**Carcinogenicity:** Data not available

**NTP:** No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

**IARC:** No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

**OSHA:** No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**Ca Prop 65:** This product does not contain any chemicals known to the State of California to cause cancer or reproductive toxicity.

**Reproductive toxicity:** Data not available

**STOT-single exposure:** Data not available

**STOT-repeated exposure:** Data not available

**Aspiration hazard:** Data not available

**Potential health effects:**

**Inhalation:** May cause irritation of the throat and upper respiratory tract.

**Ingestion:** May be harmful if swallowed. Because material hardens quickly after absorbing moisture, ingestion may result in obstruction, particularly at the pylorus.

**Skin:** Contact with skin may cause irritation and/or defatting on prolonged contact.

**Eyes:** Contact with eyes may cause irritation.

**Signs and symptoms of exposure:** Exercise appropriate procedures to minimize potential hazards.

**Additional information:** RTECS #: WS6920000 [Calcium sulfate]

**Section 12 Ecological Information**

**Toxicity to fish:** *Gasterosteus aculeatus* (fish, fresh water), LC100 = 10-15 g/L/1 day [Calcium sulfate]

**Toxicity to daphnia and other aquatic invertebrates:** *Crangon crangon* (Crustacea), NOEC = <2.5 g/L/24 hours [Calcium sulfate]

**Toxicity to algae:** *Chlorella vulgaris* (Algae), EC98 = 1.872 g/L/30 day [Calcium sulfate]

**Persistence and degradability:** No data available

**Bioaccumulative potential:** No data available

**Mobility in soil:** No data available

**PBT and vPvB assessment:** No data available

**Other adverse effects:** An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

**Section 13 Disposal Considerations**

These disposal guidelines are intended for the disposal of catalog-size quantities only. Federal regulations may apply to empty container. State and/or local regulations may be different. Dispose of in accordance with all local, state and federal regulations or contract with a licensed chemical disposal agency.

**Section 14 Transport Information (US DOT / CANADA TDG)**

<b>UN/NA number:</b> Not applicable	<b>Shipping name:</b> Not Regulated	<b>Reportable Quantity:</b> No	<b>Marine pollutant:</b> No
<b>Hazard class:</b> Not applicable	<b>Packing group:</b> Not applicable		
<b>Exceptions:</b> Not applicable	<b>2012 ERG Guide #</b> Not applicable		

**Section 15 Regulatory Information**

A chemical is considered to be listed if the CAS number for the anhydrous form is on the Inventory list.

Component	TSCA	CERLCA (RQ)	RCRA code	DSL	NDSL	WHMIS Classification
Calcium sulfate	Listed	Not listed	Not listed	Listed	Not listed	Uncontrolled product D1B ; D2A ; D2B
Cobalt chloride	Listed	Not listed	Not listed	Listed	Not listed	

**Section 16 Additional Information**

The information contained herein is furnished without warranty of any kind. Employers should use this information only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees. NTP: National Toxicology Program. IARC: International Agency for Research on Cancer, OSHA: Occupational Safety and Health Administration, STOT: Specific Target Organ Toxicity, SE: Single Exposure, RE: Repeated Exposure. ERG: Emergency Response Guidebook.



SDS #: 192

Revision Date: March 21, 2014

## Calcium Turnings Safety Data Sheet (SDS)

### SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

#### Calcium Turnings

Flinn Scientific, Inc. P.O. Box 219, Batavia, IL 60510 (800) 452-1261  
Chemtrec Emergency Phone Number: (800) 424-9555

Signal Word  
**DANGER**

Pictograms

### SECTION 2 — HAZARDS IDENTIFICATION

Hazard class: Substances and mixtures which, in contact with water, emit flammable gases (Category 2). In contact with water releases flammable hydrogen gas (H261). Handle under inert gas. Protect from moisture (P231+P232).



### SECTION 3 — COMPOSITION, INFORMATION ON INGREDIENTS

Component Name	CAS Number	Formula	Formula Weight	Concentration
Calcium (metal)	7440-70-2	Ca	40.08	

### SECTION 4 — FIRST AID MEASURES

Call a POISON CENTER or physician if you feel unwell.

**If inhaled:** Remove victim to fresh air and keep at rest in a position comfortable for breathing.

**If in eyes:** Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do so. Continue rinsing.

**If on skin:** Brush off loose particles from skin (P335). Then wash with plenty of water.

**If swallowed:** Rinse mouth. Call a POISON CENTER or physician if you feel unwell. Brush off loose particles from skin (P335).

### SECTION 5 — FIRE FIGHTING MEASURES

Flammable solid.

Violent reaction with water. Produces hydrogen.

In case of fire: Use Class D, Met-L-X, or dry sand as a fire extinguisher. Avoid water contact, violent reaction with water.

NFPA Code

H-3

F-1

R-2

No Water

### SECTION 6 — ACCIDENTAL RELEASE MEASURES

Remove all ignition sources and water. Sweep up the spill, place in a sealed bag or container, and dispose. Ventilate area and wash spill site after material pickup is complete. See Sections 8 and 13 for further information.

### SECTION 7 — HANDLING AND STORAGE

Flinn Suggested Chemical Storage Pattern: Inorganic #1. Store with metals and metal hydrides.

Handle under inert gas. Protect from moisture (P231+P232). Keep container tightly closed (P233). Store in a Flinn Chem-Saf™ bag and then inside a Finn Saf-Stor™ can.

---

**SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION**

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Wear protective gloves, protective clothing, and eye protection (P280). Wash hands thoroughly after handling.

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**SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES**

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Silver-white, soft metal. Odorless.	Boiling point: 1440 °C
Soluble: Acid. Decomposes in water to liberated hydrogen.	Melting point: 842 °C
	Specific gravity: 1.55

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**SECTION 10 — STABILITY AND REACTIVITY**

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Highly reactive with water and oxidizing agents. Contact with water will evolve extremely flammable hydrogen gas.  
Shelf life: Good, but only if stored under airtight conditions.

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**SECTION 11 — TOXICOLOGICAL INFORMATION**

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Acute effects: Skin, eye, and mucous membrane irritant due to the presence of water.	ORL-RAT LD <sub>50</sub> : N.A.
Chronic effects: N.A.	IHL-RAT LC <sub>50</sub> : N.A.
Target organs: N.A.	SKN-RBT LD <sub>50</sub> : N.A.

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**SECTION 12 — ECOLOGICAL INFORMATION**

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Data not yet available.

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**SECTION 13 — DISPOSAL CONSIDERATIONS**

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Please review all federal, state and local regulations that may apply before proceeding.  
Flinn Suggested Disposal Method #3 is one option.

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**SECTION 14 — TRANSPORT INFORMATION**

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Shipping name: Calcium. Hazard class: 4.3, Dangerous when wet. UN number: UN1401.

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**SECTION 15 — REGULATORY INFORMATION**

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TSCA-listed, EINECS-listed (231-179-5), RCRA code D001, D003.

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**SECTION 16 — OTHER INFORMATION**

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This Safety Data Sheet (SDS) is for guidance and is based upon information and tests believed to be reliable. Flinn Scientific, Inc. makes no guarantee of the accuracy or completeness of the data and shall not be liable for any damages relating thereto. The data is offered solely for your consideration, investigation, and verification. The data should not be confused with local, state, federal or insurance mandates, regulations, or requirements and CONSTITUTE NO WARRANTY. Any use of this data and information must be determined by the science instructor to be in accordance with applicable local, state or federal laws and regulations. The conditions or methods of handling, storage, use and disposal of the product(s) described are beyond the control of Flinn Scientific, Inc. and may be beyond our knowledge. FOR THIS AND OTHER REASONS, WE DO NOT ASSUME RESPONSIBILITY AND EXPRESSLY DISCLAIM LIABILITY FOR LOSS, DAMAGE OR EXPENSE ARISING OUT OF OR IN ANY WAY CONNECTED WITH THE HANDLING, STORAGE, USE OR DISPOSAL OF THIS PRODUCT(S).

N.A. = Not available, not all health aspects of this substance have been fully investigated.

N/A = Not applicable

**Consult your copy of the Flinn Science Catalog/Reference Manual for additional information about laboratory chemicals.**

**Revision Date:** March 21, 2014

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# Safety Data Sheet

Calmagite, 0.1%

**CAROLINA**<sup>®</sup>  
www.carolina.com

## Section 1 Product Description

**Product Name:** Calmagite, 0.1%  
**Recommended Use:** Science education applications  
**Synonyms:** None known  
**Distributor:** Carolina Biological Supply Company  
2700 York Road, Burlington, NC 27215  
1-800-227-1150  
**Chemical Information:** 800-227-1150 (8am-5pm (ET) M-F)  
**Chemtrec:** 800-424-9300 (Transportation Spill Response 24 hours)

## Section 2 Hazard Identification

Classification of the chemical in accordance with paragraph (d) of §1910.1200;

GHS Classification:

**Other Safety Precautions:** May cause irritation.  
May cause gastrointestinal discomfort.  
May cause irritation to respiratory tract.  
May cause irritation to skin.

## Section 3 Composition / Information on Ingredients

<u>Chemical Name</u>	<u>CAS #</u>	<u>%</u>
Calmagite (CAS # 3147-14-6) 0.1%	7732-18-5	99.9
	3147-14-6	0.1

## Section 4 First Aid Measures

### Emergency and First Aid Procedures

**Inhalation:** In case of accident by inhalation: remove casualty to fresh air and keep at rest.  
**Eyes:** In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
**Skin Contact:** After contact with skin, wash immediately with plenty of water.  
**Ingestion:** If swallowed, do not induce vomiting; seek medical advice immediately and show this container or label.

## Section 5 Firefighting Procedures

**Extinguishing Media:** Use media suitable to extinguish surrounding fire.  
**Fire Fighting Methods and Protection:** Firefighters should wear full protective equipment and NIOSH approved self-contained breathing apparatus.  
**Fire and/or Explosion Hazards:** Fire or excessive heat may produce hazardous decomposition products.  
**Hazardous Combustion Products:** None Known

## Section 6 Spill or Leak Procedures

**Steps to Take in Case Material Is Released or Spilled:** No adverse health affects expected from the clean-up of spilled material. Follow personal protective equipment recommendations found in Section 8 of this (M)SDS. Persons not wearing appropriate protective equipment should be excluded from area of spill until clean-up has been completed.  
No special spill clean-up considerations. Collect and discard in regular trash. Do not get in eyes, on skin, or on clothing.

# Safety Data Sheet

## Section 7 Handling and Storage

**Handling:** Do not ingest or take internally. Avoid contact with skin and eyes.  
**Storage:** Suitable for any general chemical storage.  
**Storage Code:** Green - general chemical storage

## Section 8 Protection Information

Chemical Name	ACGIH		OSHA PEL	
	(TWA)	(STEL)	(TWA)	(STEL)
No data available	N/A	N/A	N/A	N/A

### Control Parameters

**Engineering Measures:** No exposure limits exist for the constituents of this product. General room ventilation might be required to maintain operator comfort under normal conditions of use.

**Personal Protective Equipment (PPE):** Lab coat, apron, eye wash, safety shower.

**Respiratory Protection:** No respiratory protection required under normal conditions of use.

**Eye Protection:** Wear chemical splash goggles when handling this product. Have an eye wash station available.

**Skin Protection:** Avoid skin contact by wearing chemically resistant gloves, an apron and other protective equipment depending upon conditions of use. Inspect gloves for chemical break-through and replace at regular intervals. Clean protective equipment regularly. Wash hands and other exposed areas with mild soap and water before eating, drinking, and when leaving work.

**Gloves:** Natural rubber, Neoprene, PVC or equivalent.

## Section 9 Physical Data

<b>Formula:</b> C <sub>17</sub> H <sub>14</sub> N <sub>2</sub> O <sub>5</sub> S (aq)	<b>Vapor Pressure:</b> N/A
<b>Molecular Weight:</b> N/A	<b>Evaporation Rate (BuAc=1):</b> N/A
<b>Appearance:</b> Colorless Liquid	<b>Vapor Density (Air=1):</b> N/A
<b>Odor:</b> No data available	<b>Specific Gravity:</b> approx. 1
<b>Odor Threshold:</b> No data available	<b>Solubility in Water:</b> Soluble
<b>pH:</b> No data available	<b>Log Pow (calculated):</b> No data available
<b>Melting Point:</b> No data available	<b>Autoignition Temperature:</b> No data available
<b>Boiling Point:</b> 100 C	<b>Decomposition Temperature:</b> No data available
<b>Flash Point:</b> No data available	<b>Viscosity:</b> 10
<b>Flammable Limits in Air:</b> N/A N/A	<b>Percent Volatile by Volume:</b> N/A

## Section 10 Reactivity Data

**Reactivity:** No data available

**Chemical Stability:** Stable under normal conditions.

**Conditions to Avoid:** None known.

**Incompatible Materials:** Water-reactive materials, Strong oxidizing agents

**Hazardous Decomposition Products:** None Known

**Hazardous Polymerization:** Will not occur

# Safety Data Sheet

## Section 11

## Toxicity Data

**Routes of Entry:** No information available  
**Symptoms (Acute):** None Known  
**Delayed Effects:** No data available

### Acute Toxicity:

Chemical Name	CAS Number	Oral LD50	Dermal LD50	Inhalation LC50
Water	7732-18-5	Oral LD50 Rat 90000 mg/kg		

### Carcinogenicity:

Chemical Name	CAS Number	IARC	NTP	OSHA
No data available		Not listed	Not listed	Not listed

### Chronic Effects:

**Mutagenicity:** No evidence of a mutagenic effect.  
**Teratogenicity:** No evidence of a teratogenic effect (birth defect).  
**Sensitization:** No evidence of a sensitization effect.  
**Reproductive:** No evidence of negative reproductive effects.  
**Target Organ Effects:**  
**Acute:** No data available  
**Chronic:** Not listed as a carcinogen by IARC, NTP or OSHA., To the best of our knowledge, the toxicological properties of this mixture have not been thoroughly evaluated.

## Section 12

## Ecological Data

**Overview:** This material is not expected to be harmful to the ecology.  
**Mobility:** No data  
**Persistence:** No data  
**Bioaccumulation:** No data  
**Degradability:** No data  
**Other Adverse Effects:** No data

Chemical Name	CAS Number	Eco Toxicity
Water	7732-18-5	No data available

## Section 13

## Disposal Information

**Disposal Methods:** Dispose in accordance with all applicable Federal, State and Local regulations. Always contact a permitted waste disposer (TSD) to assure compliance.  
**Waste Disposal Code(s):** Not Determined

## Section 14

## Transport Information

<b>Ground - DOT Proper Shipping Name:</b> Not regulated for transport	<b>Air - IATA Proper Shipping Name:</b> Not regulated for air transport by IATA.
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# Safety Data Sheet

## Section 15

## Regulatory Information

**TSCA Status:** All components in this product are on the TSCA Inventory.

Chemical Name	CAS Number	§ 313 Name	§ 304 RQ	CERCLA RQ	§ 302 TPQ	CAA 112(2) TQ
No data available		No	No	No	No	No

## Section 16

## Additional Information

**Revised:** 09/03/2014

**Replaces:** 08/27/2014

**Printed:** 09-12-2014

The information provided in this (Material) Safety Data Sheet represents a compilation of data drawn directly from various sources available to us. Carolina Biological Supply makes no representation or guarantee as to the suitability of this information to a particular application of the substance covered in the (Material) Safety Data Sheet.

### Glossary

ACGIH	American Conference of Governmental Industrial Hygienists	NTP	National Toxicology Program
CAS	Chemical Abstract Service Number	OSHA	Occupational Safety and Health Administration
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act	PEL	Permissible Exposure Limit
DOT	U.S. Department of Transportation	ppm	Parts per million
IARC	International Agency for Research on Cancer	RCRA	Resource Conservation and Recovery Act
N/A	Not Available	SARA	Superfund Amendments and Reauthorization Act
		TLV	Threshold Limit Value
		TSCA	Toxic Substances Control Act
		IDLH	Immediately dangerous to life and health

# FLINN SCIENTIFIC, INC.

## Safety Data Sheet (SDS)

SDS #: 215.00

Revision Date: March 24, 2014

### SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

#### Carborundum

Flinn Scientific, Inc. P.O. Box 219, Batavia, IL 60510 (800) 452-1261

CHEMTREC Emergency Phone Number: (800) 424-9300

Signal Word N/A

Pictograms

### SECTION 2 — HAZARDS IDENTIFICATION

This chemical is considered nonhazardous according to GHS classifications for the Hazard Communication Standard. Treat all laboratory chemicals with caution.

Although this material is considered to be nonhazardous, unpredictable reactions among chemicals are always possible. Prudent laboratory practices should be observed.

### SECTION 3 — COMPOSITION, INFORMATION ON INGREDIENTS

Component Name	CAS Number	Formula	Formula Weight	Concentration
Carborundum	409-21-2	SiC	Varies	
Synonym: Silicon carbide				

### SECTION 4 — FIRST AID MEASURES

Call a POISON CENTER or physician if you feel unwell.

**If inhaled:** Remove victim to fresh air and keep at rest in a position comfortable for breathing.

**If in eyes:** Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do so. Continue rinsing.

**If on skin:** Wash with plenty of water.

**If swallowed:** Rinse mouth. Call a POISON CENTER or physician if you feel unwell.

### SECTION 5 — FIRE FIGHTING MEASURES

Nonflammable solid.

When heated to decomposition, may emit toxic fumes.

**In case of fire:** Use a tri-class dry chemical fire extinguisher.

NFPA CODE  
None  
established

### SECTION 6 — ACCIDENTAL RELEASE MEASURES

Wipe up the spill, place in a sealed bag or container, and dispose. Ventilate area and wash spill site after material pickup is complete. See Sections 8 and 13 for further information.



---

**SECTION 7 — HANDLING AND STORAGE**

---

Flinn Suggested Chemical Storage Pattern: Inorganic #4. Store with hydroxides, oxides, silicates and carbonates.  
Store in a cool, dry place.

---

**SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION**

---

Avoid contact with eyes. Wash hands thoroughly after handling.  
Exposure guidelines: (as nonfibrous silicon carbide) TLV 10 mg/m<sup>3</sup> (inhalable fraction) ACGIH)

---

**SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES**

---

Gray crystalline powder. Odorless. Melting point: 2000 °C (sublimes)  
Soluble: Insoluble in water and alcohol. Specific gravity: 3.217

---

**SECTION 10 — STABILITY AND REACTIVITY**

---

Shelf life: Indefinite, if stored properly.

---

**SECTION 11 — TOXICOLOGICAL INFORMATION**

---

Acute effects: Irritating dust.	ORL-RAT LD <sub>50</sub> : N.A.
Chronic effects: N.A.	IHL-RAT LC <sub>50</sub> : N.A.
Target organs: N.A.	SKN-RBT LD <sub>50</sub> : N.A.

N.A. = Not available, not all health aspects of this substance have been fully investigated.

---

**SECTION 12 — ECOLOGICAL INFORMATION**

---

Data not yet available.

---

**SECTION 13 — DISPOSAL CONSIDERATIONS**

---

Please review all federal, state and local regulations that may apply before proceeding.  
Flinn Suggested Disposal Method #26a is one option.

---

**SECTION 14 — TRANSPORT INFORMATION**

---

Shipping name: Not regulated. Hazard class: N/A. UN number: N/A.

N/A = Not applicable

---

**SECTION 15 — REGULATORY INFORMATION**

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TSCA-listed, EINECS-listed (206-991-8).

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**SECTION 16 — OTHER INFORMATION**

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This Safety Data Sheet (SDS) is for guidance and is based upon information and tests believed to be reliable. Flinn Scientific, Inc. makes no guarantee of the accuracy or completeness of the data and shall not be liable for any damages relating thereto. The data is offered solely for your consideration, investigation, and verification. The data should not be confused with local, state, federal or insurance mandates, regulations, or requirements and CONSTITUTE NO WARRANTY. Any use of this data and information must be determined by the science instructor to be in accordance with applicable local, state or federal laws and regulations. The conditions or methods of handling, storage, use and disposal of the product(s) described are beyond the control of Flinn Scientific, Inc. and may be beyond our knowledge. FOR THIS AND OTHER REASONS, WE DO NOT ASSUME RESPONSIBILITY AND EXPRESSLY DISCLAIM LIABILITY FOR LOSS, DAMAGE OR EXPENSE ARISING OUT OF OR IN ANY WAY CONNECTED WITH THE HANDLING, STORAGE, USE OR DISPOSAL OF THIS PRODUCT(S).

Consult your copy of the *Flinn Science Catalog/Reference Manual* for additional information about laboratory chemicals.

**Revision Date:** March 24, 2014



# Material Safety Data Sheet

## Isopropyl Alcohol - 91%

CARE ONE ISOPROPYL ALCOHOL

### Section I

---

**Manufacturer:** Aaron Industries

**Address:** Highway 72 West, P.O. Box 305  
Clinton, South Carolina 29325

**Emergency Phone (Chemtrec):** 800.424.9300

**Generic Name:** Isopropyl Alcohol

**Trade Name:** Isopropyl Alcohol

**Chemical Family:** Pharmaceutical Preparation  
Medicament inside a glass, plastic, or metal container suitable for dispensing. May be overpacked in a cardboard or plastic container.

**Chemical Ingredients:** Isopropyl Alcohol (CAS 67-63-0), Water

### Section II

#### Physical Data

---

**Boiling Point:** 82°C (Isopropyl Alcohol 99%)

**Vapor Pressure:** 36mm Hg @ 25°C (Isopropyl Alcohol 99%)

**Vapor Density (Air = 1):** 2.6

**Specific Gravity:** 0.8191-0.8123

**Percent Volatile by Volume:** 100%

**Evaporation Rate:** Unknown

**Solubility in Water:** 100%

**Appearance and Odor:** Glass, metal, or plastic container, properly labeled. Contents are clear and colorless and may have a characteristic alcoholic odor.

### Section III

#### Fire and Explosion Hazard Data

---

**Flash Point:** 16.1°C

**Flammable Limits:** Lower 5.0 Upper 12.0

**Extinguishing Method:** Water, chemical, carbon dioxide, or other methods as required.

**Special Fire Fighting Precautions:** Wear SCBA

**Unusual Fire and Explosion Hazards:** Combustible liquid. Avoid heat, sparks, and open flame.



# Material Safety Data Sheet

## Isopropyl Alcohol - 91%

### Section IV

#### Health Hazard Data

---

**Threshold Limit Value:** 400ppm (980mg/m<sup>3</sup>) - 500ppm (1225mg/m<sup>3</sup>)

**Effects of Over Exposure:** Unknown

**Emergency First Aid Procedures:** If on the skin (including eyes, nose, or mouth), flush with water. If ingested, call a physician, pharmacist, or a Poison Control Center immediately.

### Section V

#### Reactivity Data

---

**Stability Conditions to Avoid:** Avoid excessive temperatures. Keep away from open flames.

**Incompatibility:** None

**Hazardous Decomposition Products:** None

**Hazardous Polymerization:** None

**Conditions to Avoid:** Keep away from open flames.

**Materials and Conditions to Avoid Completely:** Caustics, amines, alkanolamines, aldehydes, strong oxidizing agents, and chlorinated compounds.

### Section VI

#### Spill or Leak Procedure

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**Steps to be taken in case material is released or spilled:** Clean up with damp cloth or moist sponge. Flush with water if necessary.

**Waste Disposal Method:** Incineration or land fill.

### Section VII

#### Special Protection Information

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**Respiratory Protection:** None required

**Ventilation:** Normal

**Protective Gloves:** Recommended

**Eye Protection:** Recommended (Safety Glasses or Face Shield)

**Other Protective Equipment:** None

### Section VIII

#### Special Precautions

---

**Precautions to be taken in handling and storage:** Take care to avoid puncturing containers.

**Other Precautions:** Avoid excessive temperatures. Keep away from open flames.



# Material Safety Data Sheet

## Isopropyl Alcohol - 91%

### Section IX

### Other Information

Keep this and all medication out of the reach of children.

	HMIS (USA)	NFPA (USA)
Health	2	1
Flammability	3	3
Reactivity	0	0

**Key:** 4= Severe, 3=Serious, 2=Moderate, 1=Slight, 0=Minimal  
Hazardous Materials Identification System (HMIS)  
National Fire Protection Agency (NFPA)

This information herein is furnished without warranty of any kind. This information should be used only as a supplement to information already in your possession concerning this product. The determination of whether or under what conditions this product should be used by you or your employees is yours to make.

# SAFETY DATA SHEET



Issuing Date: 27-Mar-2015

Revision Date: 27-Mar-2015

Version 1

## IDENTIFICATION

**Product Name** Cascade Complete Powder Dishwasher Detergent - Fresh

**Product ID:** 99300379\_RET\_NG

**Product Type:** Finished Product - Consumer (Retail) Use Only

**Recommended Use** Dish Care

**Restrictions on Use** Use only as directed on label.

**Synonyms** Cascade Complete Powder Dishwasher Detergent- Citrus Breeze (99300383\_RET\_NG)

**Manufacturer** PROCTER & GAMBLE - Fabric and Home Care Division. Ivorydale Technical Centre. 5289 Spring Grove Avenue, Cincinnati, Ohio 45217-1087 USA

**E-mail Address** pgsds.im@pg.com

**Emergency Telephone** Transportation (24 HR)  
CHEMTREC - 1-800-424-9300  
(U.S./ Canada) or 1-703-527-3887  
Mexico toll free in country: 800-681-9531

## HAZARD IDENTIFICATION

"Consumer Products", as defined by the US Consumer Product Safety Act and which are used as intended (typical consumer duration and frequency), are exempt from the OSHA Hazard Communication Standard (29 CFR 1910.1200). This SDS is being provided as a courtesy to help assist in the safe handling and proper use of the product.

This product is classified under 29CFR 1910.1200(d) and the Canadian Hazardous Products Regulation as follows:.

### Hazard Category

**Eye Damage / Irritation** Category 2A

**Signal Word** WARNING

**Hazard Statements** Causes serious eye irritation

**Hazard pictograms**



**Precautionary Statements -** Wash hands thoroughly after handling

**Prevention**

**Precautionary Statements - Response** IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
If eye irritation persists: Get medical advice/attention  
IF SWALLOWED:  
Drink 1 or 2 glasses of water

**Precautionary Statements - Storage** None

**Precautionary Statements - Disposal** None

**Hazards not otherwise classified (HNOC)** None

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

Ingredients are listed according to 29CFR 1910.1200 Appendix D and the Canadian Hazardous Products Regulation

Chemical Name	Synonyms	Trade Secret	CAS No.	WGK #1
Sodium carbonate	-	No	497-19-8	30 - 35
Silicic acid, sodium salt	-	No	1344-09-8	1 - 5

**4. FIRST AID MEASURES**

First aid measures for different exposure routes

**Eye contact** Rinse with plenty of water. Get medical attention immediately if irritation persists.

**Skin contact** Rinse with plenty of water. Get medical attention if irritation develops and persists.

**Ingestion** Drink 1 or 2 glasses of water. Do NOT induce vomiting. Get medical attention immediately if symptoms occur.

**Inhalation** Move to fresh air. If symptoms persist, call a physician.

**Most important symptoms/effects, acute and delayed** None under normal use conditions.

Indication of immediate medical attention and special treatment needed, if necessary

**Notes to Physician** Treat symptomatically.

**5. FIRE FIGHTING MEASURES**

**Suitable extinguishing media** Dry chemical, CO<sub>2</sub>, alcohol-resistant foam or water spray.

**Unsuitable Extinguishing Media** None.

**Special hazard** None known.

**Special protective equipment for fire-fighters** As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

Specific hazards arising from the chemical None.

## 6. ACCIDENTAL RELEASE MEASURES

### Personal precautions, protective equipment and emergency procedures

**Personal precautions** Use personal protective equipment. Do not get in eyes, on skin, or on clothing.

**Advice for emergency responders** Use personal protective equipment as required.

### Methods and materials for containment and cleaning up

**Methods for containment** Prevent dust cloud. Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up** Sweep up and shovel into suitable containers for disposal. Dispose of in accordance with local regulations.

## 7. HANDLING AND STORAGE

### Precautions for safe handling

**Advice on safe handling** Use personal protective equipment as required. Keep container closed when not in use. Never return spills in original containers for re-use. Keep out of the reach of children.

### Conditions for safe storage, including any incompatibilities

**Storage Conditions** Keep containers tightly closed in a dry, cool and well-ventilated place.

**Incompatible products** None known.

## 8. EXPOSURE CONTROL / PERSONAL PROTECTION

### Control parameters

**Exposure Guidelines** No exposure limits noted for ingredient(s).

### Exposure controls

**Engineering Measures** **Distribution, Workplace and Household Settings:**  
Ensure adequate ventilation

**Product Manufacturing Plant (needed at Product-Producing Plant ONLY):**  
Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction

### Personal Protective Equipment

**Eye Protection** **Distribution, Workplace and Household Settings:**  
No special protective equipment required

**Product Manufacturing Plant (needed at Product-Producing Plant ONLY):**  
Use appropriate eye protection

**Hand Protection** **Distribution, Workplace and Household Settings:**  
No special protective equipment required

**Product Manufacturing Plant (needed at Product-Producing Plant ONLY):**  
Protective gloves

**Skin and Body Protection**

**Distribution, Workplace and Household Settings:**  
No special protective equipment required

**Product Manufacturing Plant (needed at Product-Producing Plant ONLY):**  
Wear suitable protective clothing

**Respiratory Protection**

**Distribution, Workplace and Household Settings:**  
No special protective equipment required

**Product Manufacturing Plant (needed at Product-Producing Plant ONLY):**  
In case of insufficient ventilation wear suitable respiratory equipment

**9. PHYSICAL AND CHEMICAL PROPERTIES**

**Physical State @20°C** solid  
**Appearance** white powder  
**Odor** Scented  
**Odor threshold** No information available

<u>Property</u>	<u>Values</u>	<u>Note</u>
pH value	11.10	(as 1% solution)
Melting/freezing point	No information available	
Boiling point/boiling range	No information available	
Flash point	No information available	
Evaporation rate	No information available	
Flammability (solid, gas)	No information available	
Flammability Limits in Air		
Upper flammability limit	No information available	
Lower Flammability Limit	No information available	
Vapor pressure	No information available	
Vapor density	No information available	
Relative density	1.18 g/cc	
Water solubility	100%	
Solubility in other solvents	No information available	
Partition coefficient: n-octanol/water	No information available	
Autoignition temperature	No information available	
Decomposition temperature	No information available	
Viscosity of Product	No information available	

**VOC Content (%)** Products comply with US state and federal regulations for VOC content in consumer products.

**10. TOXICOLOGICAL INFORMATION**

**Reactivity** None under normal use conditions.  
**Stability** Stable under normal conditions.  
**Hazardous polymerization** Hazardous polymerization does not occur.  
**Hazardous Reactions** None under normal processing.  
**Conditions to Avoid** None under normal processing.  
**Materials to avoid** None in particular.



Hazardous Decomposition Products None under normal use.

## 11. TOXICOLOGICAL INFORMATION

### Product Information

Information on likely routes of exposure

Inhalation	No known effect.
Skin contact	No known effect.
Ingestion	No known effect.
Eye contact	Causes serious eye irritation.

### Delayed and immediate effects as well as chronic effects from short and long-term exposure

Acute toxicity	No known effect.
Skin corrosion/irritation	No known effect.
Serious eye damage/eye irritation	Causes serious eye irritation.
Skin sensitization	No known effect.
Respiratory sensitization	No known effect.
Germ cell mutagenicity	No known effect.
Neurological Effects	No known effect.
Reproductive toxicity	No known effect.
Developmental toxicity	No known effect.
Teratogenicity	No known effect.
STOT - single exposure	No known effect.
STOT - repeated exposure	No known effect.
Target Organ Effects	No known effect.
Aspiration hazard	No known effect.
Carcinogenicity	No known effect.

### Component Information

Component Name	CAS No.	LD50 (mg/kg bw)	LD01 (mg/kg bw)	Other Data
Sodium carbonate	497-19-8	2800 mg/kg bw (Guideline not indicated; rat)	> 2000 mg/kg bw (EPA 16 CFR 1500.40; rabbit)	-
Silicic acid, sodium salt	1344-09-8	3400 mg/kg bw (Similar to OECD 401; standard acute method; rat)	> 5000 mg/kg bw (Read across data on AgSil TM 25 Potassium silicate solution; rat)	> 2.06 mg/L air (Read across data AgSil TM 25 Potassium silicate solution; EPA OPPTS 870.1300; standard acute method; rat)

### Ecotoxicity

The product is not expected to be hazardous to the environment.

Persistence and degradability	No information available.
Bioaccumulative potential	No information available.
Mobility	No information available.
Other adverse effects	No information available.

### Waste treatment

Waste from Residues / Unused Products	Disposal should be in accordance with applicable regional, national and local laws and regulations.
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**Contaminated packaging** Disposal should be in accordance with applicable regional, national and local laws and regulations.

**California Hazardous Waste Codes (non-household setting)** 331

**14. TRANSPORT INFORMATION**

**DOT** Not regulated  
**IMDG** Not regulated  
**IATA** Not regulated

**15. REGULATORY INFORMATION**

**U.S. Federal Regulations**

**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

**CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

**Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)**

This product does not contain any substances regulated as hazardous air pollutants (HAPS) under Section 112 of the Clean Air Act Amendments of 1990.

**Clean Water Act**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

**California Proposition 65**

This product is not subject to warning labeling under California Proposition 65.

**U.S. State Regulations (RTK)**

Chemical Name	Chemical ID	Regulation
Sulfuric acid sodium salt (1:2)	7757-82-6	X
Sulfuric acid sodium salt (1:2)	7757-82-6	X

**International Inventories**

**United States**

All intentionally-added components of this product(s) are listed on the US TSCA Inventory.

**Canada**

This product is in compliance with CEPA for import by P&G.

**Legend**

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory

**CEPA** - Canadian Environmental Protection Act

**16. OTHER INFORMATION**

**Issuing Date:** 27-Mar-2015

**Revision Date:** 27-Mar-2015

**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

**End of SDS**

# Safety Data Sheet

## Cell Lysis Solution



### Section 1 Product Description

**Product Name:** Cell Lysis Solution  
**Recommended Use:** Science education applications  
**Synonyms:** Con-Sen Highly Concentrated Cleaner  
**Distributor:** Carolina Biological Supply Company  
2700 York Road, Burlington, NC 27215  
1-800-227-1150  
**Chemical Information:** 800-227-1150 (8am-5pm (ET) M-F)  
**Chemtrec:** 800-424-9300 (Transportation Spill Response 24 hours)

### Section 2 Hazard Identification

Classification of the chemical in accordance with paragraph (d) of §1910.1200;

## WARNING

Causes eye irritation.

**GHS Classification:**  
Serious Eye Damage/Eye Irritation Category 2B

### Section 3 Composition / Information on Ingredients

<u>Chemical Name</u>	<u>CAS #</u>	<u>%</u>
Cell Lysis Solution		100
Proprietary mixture containing coconut diethanolamide (61790-63-4); tetra potassium pyrophosphate (7320-34-5); potassium tallate (61790-44-1); and water (7732-18-5)		

### Section 4 First Aid Measures

#### Emergency and First Aid Procedures

**Inhalation:** In case of accident by inhalation: remove casualty to fresh air and keep at rest.  
**Eyes:** IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.  
**Skin Contact:** After contact with skin, wash immediately with plenty of water.  
**Ingestion:** If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

### Section 5 Firefighting Procedures

**Extinguishing Media:** Use methods suitable to fight surrounding fire.  
**Fire Fighting Methods and Protection:** Firefighters should wear full protective equipment and NIOSH approved self-contained breathing apparatus.  
**Fire and/or Explosion Hazards:** Fire or excessive heat may produce hazardous decomposition products.  
**Hazardous Combustion Products:** Carbon dioxide, Carbon monoxide

### Section 6 Spill or Leak Procedures

**Steps to Take in Case Material Is Released or Spilled:** No health affects expected from the clean-up of this material if contact can be avoided. Follow personal protective equipment recommendations found in Section 8 of this (M)SDS

# Safety Data Sheet

Prevent the spread of any spill to minimize harm to human health and the environment if safe to do so. Wear complete and proper personal protective equipment following the recommendation of Section 8 at a minimum. Dike with suitable absorbent material like granulated clay. Gather and store in a sealed container pending a waste disposal evaluation.

## Section 7 Handling and Storage

**Handling:** Wash thoroughly after handling. Do not ingest or take internally.  
**Storage:** Suitable for any general chemical storage.  
**Storage Code:** Green - general chemical storage

## Section 8 Protection Information

<u>Chemical Name</u>	<u>ACGIH</u>	<u>OSHA PEL</u>		
	(TWA)	(STEL)	(TWA)	(STEL)
No data available	N/A	N/A	N/A	N/A

### Control Parameters

**Engineering Measures:** No exposure limits exist for the constituents of this product. No engineering controls are likely to be required to maintain operator comfort under normal conditions of use.

**Personal Protective Equipment (PPE):** Lab coat, apron, eye wash, safety shower.

**Respiratory Protection:** No respiratory protection required under normal conditions of use.

**Respirator Type(s):** Not normally required.

**Eye Protection:** Wear chemical splash goggles when handling this product. Have an eye wash station available.

**Skin Protection:** Not normally considered a skin hazard. Where use can result in skin contact, practice good personal hygiene. Wash hands and other exposed areas with mild soap and water before eating, drinking, and when leaving work.

**Gloves:** No information available

## Section 9 Physical Data

<b>Formula:</b> See Section 3	<b>Vapor Pressure:</b> N/A
<b>Molecular Weight:</b> N/A	<b>Evaporation Rate (BuAc=1):</b> N/A
<b>Appearance:</b> Blue Liquid	<b>Vapor Density (Air=1):</b> N/A
<b>Odor:</b> Moderate Pleasant, Floral	<b>Specific Gravity:</b> 1.01
<b>Odor Threshold:</b> No data available	<b>Solubility in Water:</b> Soluble
<b>pH:</b> 10.5	<b>Log Pow (calculated):</b> No data available
<b>Melting Point:</b> No data available	<b>Autoignition Temperature:</b> No data available
<b>Boiling Point:</b> 100 C	<b>Decomposition Temperature:</b> No data available
<b>Flash Point:</b> No data available	<b>Viscosity:</b> No data available
<b>Flammable Limits in Air:</b> N/A	<b>Percent Volatile by Volume:</b> N/A

## Section 10 Reactivity Data

**Reactivity:** Not generally reactive under normal conditions.  
**Chemical Stability:** Stable under normal conditions.  
**Conditions to Avoid:** None known.  
**Hazardous Polymerization:** Will not occur

## Section 11 Toxicity Data

**Routes of Entry:** Ingestion, skin and eye contact.  
**Symptoms (Acute):** Gastrointestinal,, Eye Irritation, Dermatitis  
**Delayed Effects:** No data available

### Acute Toxicity:

<u>Chemical Name</u>	<u>CAS Number</u>	<u>Oral LD50</u>	<u>Dermal LD50</u>	<u>Inhalation LC50</u>
No data available		Not determined	Not determined	Not determined

### Carcinogenicity:

<u>Chemical Name</u>	<u>CAS Number</u>	<u>IARC</u>	<u>NTP</u>	<u>OSHA</u>
No data available		Not listed	Not listed	Not listed

# Safety Data Sheet

**Chronic Effects:****Mutagenicity:****Teratogenicity:****Sensitization:****Reproductive:****Target Organ Effects:****Acute:****Chronic:**

No evidence of a mutagenic effect.  
No evidence of a teratogenic effect (birth defect).  
No evidence of a sensitization effect.  
No evidence of negative reproductive effects.  
No data available  
Not listed as a carcinogen by IARC, NTP or OSHA.

## Section 12

## Ecological Data

**Overview:**

This material is not expected to be harmful to the ecology.

**Mobility:**

No data

**Persistence:**

No data

**Bioaccumulation:**

No data

**Degradability:**

No data

**Other Adverse Effects:**

No data

**Chemical Name****CAS Number****Eco Toxicity**

N/A

## Section 13

## Disposal Information

**Disposal Methods:**

Dispose in accordance with all applicable Federal, State and Local regulations. Always contact a permitted waste disposer (TSD) to assure compliance.

**Waste Disposal Code(s):**

This material is not considered to be a RCRA hazardous waste.

## Section 14

## Transport Information

**Ground - DOT Proper Shipping Name:**

Not regulated for transport by DOT

**Air - IATA Proper Shipping Name:**

Not regulated for air transport by IATA.

## Section 15

## Regulatory Information

**TSCA Status:**

A component (or components) of this product is not listed on the TSCA Inventory of Existing Chemical Substances. Product is for research and development use only.

**Chemical Name****CAS Number****§ 313 Name****§ 304 RQ****CERCLA RQ****§ 302 TPQ****CAA 112(2) TQ**

No data available

No

No

No

No

No

**California Prop 65:**

No California Proposition 65 ingredients

## Section 16

## Additional Information

# Safety Data Sheet

Revised: 08/21/2018

Replaces: 06/15/2018

Printed: 08-25-2018

The information provided in this (Material) Safety Data Sheet represents a compilation of data drawn directly from various sources available to us. Carolina Biological Supply makes no representation or guarantee as to the suitability of this information to a particular application of the substance covered in the (Material) Safety Data Sheet.

## Glossary

ACGIH	American Conference of Governmental Industrial Hygienists	NTP	National Toxicology Program
CAS	Chemical Abstract Service Number	OSHA	Occupational Safety and Health Administration
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act	PEL	Permissible Exposure Limit
DOT	U.S. Department of Transportation	ppm	Parts per million
IARC	International Agency for Research on Cancer	RCRA	Resource Conservation and Recovery Act
N/A	Not Available	SARA	Superfund Amendments and Reauthorization Act
		TLV	Threshold Limit Value
		TSCA	Toxic Substances Control Act
		IDLH	Immediately dangerous to life and health

## Section 1 Chemical Product and Company Information

Page E1 of E2



5100 West Henrietta Rd  
PO Box 92912  
Rochester, NY 14692-9012  
Tel: (800) 962-2660

**CHEMTREC 24 Hour Emergency**  
**Phone Number (800) 424-9300**  
For laboratory use only.  
Not for drug, food or household use.

<b>Product</b>	CETYL ALCOHOL
<b>Synonyms</b>	1-Hexadecanol / Hexadecyl Alcohol

## Section 2 Hazards Identification

This substance or mixture has not been classified as hazardous according to the Globally Harmonized System (GHS) of Classification and Labeling of Chemicals.

**Signal word:** None required  
**Pictograms:** No symbol required  
**Target organs:** None known

**GHS Classification:** None required  
**GHS Label information: Hazard statement:** None required  
**Precautionary statement:** None required

**Supplemental information:**

Do not breathe dust. Do not get in eyes, on skin, or on clothing. Wear protective gloves/protective clothing/eye protection/face protection. Wash hands thoroughly after handling. Get medical attention if you feel unwell.

Ca Prop 65: This product does not contain any chemicals known to the State of California to cause cancer or reproductive toxicity.

Chemical Name	CAS #	%	EINECS
Cetyl alcohol	36653-82-4	100%	253-149-0

**INGESTION:** MAY BE HARMFUL IF SWALLOWED. Call physician or Poison Control Center immediately. Induce vomiting only if advised by appropriate medical personnel. Never give anything by mouth to an unconscious person.

**INHALATION:** MAY BE HARMFUL IF INHALED. MAY CAUSE RESPIRATORY TRACT IRRITATION. Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

**EYE CONTACT:** MAY CAUSE EYE IRRITATION. Check for and remove contact lenses. Flush thoroughly with water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get immediate medical attention.

**SKIN ABSORPTION:** MAY BE HARMFUL IF ABSORBED THROUGH SKIN. MAY CAUSE SKIN IRRITATION. Remove contaminated clothing. Flush thoroughly with mild soap and water. If irritation occurs, get medical attention.

**Suitable Extinguishing Media:** Use any media suitable for extinguishing supporting fire.

**Protective Actions for Fire-fighters:** In fire conditions, wear a NIOSH/MSHA-approved self-contained breathing apparatus and full protective gear. Use water spray to keep fire-exposed containers cool.

**Specific Hazards:** During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

**Personal Precautions:** Evacuate personnel to safe area. Use proper personal protective equipment as indicated in Section 8. Provide adequate ventilation.

**Environmental Precautions:** Avoid runoff into storm sewers and ditches which lead to waterways.

**Containment and Cleanup:** Recover for reuse if not contaminated. Sweep or vacuum up and place in a suitable container for proper disposal. Wash spill area with soap and water.



**Precautions for Safe Handling:** Read label on container before using. Do not wear contact lenses when working with chemicals. Keep out of reach of children. Avoid contact with eyes, skin and clothing. Do not inhale dusts. Use with adequate ventilation. Avoid ingestion. Wash thoroughly after handling. Remove and wash clothing before reuse.

**Conditions for Safe Storage:** Store in a cool, dry, well-ventilated area away from incompatible substances.

## Section 8 Exposure Controls / Personal Protection

Exposure Limits:	Chemical Name	ACGIH (TLV)	OSHA (PEL)	NIOSH (REL)
	Cetyl alcohol	Not established	Not established	Not established

**Engineering controls:** Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower and fire extinguishing material. Personnel should wear safety glasses, goggles, or faceshield, lab coat or apron, appropriate protective gloves. Use adequate ventilation to keep airborne concentrations low.

**Respiratory protection:** None should be needed in normal laboratory handling at room temperatures. If dusty conditions prevail, work in fume hood or wear a NIOSH/MSHA-approved respirator.

## Section 9 Physical &amp; Chemical Properties

<b>Appearance:</b> Solid. White, waxy flakes <b>Odor:</b> No odor <b>Odor threshold:</b> Data not available <b>pH:</b> Data not available <b>Melting / Freezing point:</b> 49-50°C (120-122°F) <b>Boiling point:</b> 190°C (374°F) <b>Flash point:</b> 113°C (235°F) CC	<b>Evaporation rate ( = 1):</b> Data not available <b>Flammability (solid/gas):</b> Data not available <b>Explosion limits: Lower / Upper:</b> 1% / 8% <b>Vapor pressure (mm Hg):</b> <0.1 <b>Vapor density (Air = 1):</b> 8.34 g/L <b>Relative density (Specific gravity):</b> 0.818 g/cm <sup>3</sup> <b>Solubility(ies):</b> Insoluble in water	<b>Partition coefficient:</b> Data not available <b>Auto-ignition temperature:</b> Data not available <b>Decomposition temperature:</b> Data not available <b>Viscosity:</b> Data not available <b>Molecular formula:</b> CH <sub>3</sub> (CH <sub>2</sub> ) <sub>14</sub> CH <sub>2</sub> OH <b>Molecular weight:</b> 242.45
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## Section 10 Stability &amp; Reactivity

**Chemical stability:** Stable

**Hazardous polymerization:** Will not occur.

**Conditions to avoid:** Excessive temperatures, heat, sparks, open flame and other sources of ignition.

**Incompatible materials:** Strong oxidizers and acids.

**Hazardous decomposition products:** Carbon oxides.

## Section 11 Toxicological Information

**Acute toxicity:** Oral-rat LD50: 5000 mg/kg

**Skin corrosion/irritation:** Data not available

**Serious eye damage/irritation:** Data not available

**Respiratory or skin sensitization:** Data not available

**Germ cell mutagenicity:** Data not available

**Carcinogenicity:** Data not available

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Ca Prop 65: This product does not contain any chemicals known to the State of California to cause cancer or reproductive toxicity.

**Reproductive toxicity:** Data not available

**STOT-single exposure:** Data not available

**STOT-repeated exposure:** Data not available

**Aspiration hazard:** Data not available

**Potential health effects:**

Inhalation: May be harmful by inhalation.

Ingestion: May be harmful if swallowed.

Skin: Contact with skin causes severe irritation.

Eyes: Contact with eyes may cause severe irritation.

**Signs and symptoms of exposure:** To the best of our knowledge the chemical, physical and toxicological properties have not been thoroughly investigated. Specific data is not available. Exercise appropriate procedures to minimize potential hazards.

**Additional information: RTECS #:** MM0225000

**Toxicity to fish:** No data available

**Toxicity to daphnia and other aquatic invertebrates:** No data available

**Toxicity to algae:** No data available

**Persistence and degradability:** No data available

**Bioaccumulative potential:** No data available

**Mobility in soil:** No data available

**PBT and vPvB assessment:** No data available

**Other adverse effects:** An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

These disposal guidelines are intended for the disposal of catalog-size quantities only. Federal regulations may apply to empty container. State and/or local regulations may be different. Dispose of in accordance with all local, state and federal regulations or contract with a licensed chemical disposal agency.

## Section 12 REGULATORY INFORMATION (U.S., CANADA, UK)

**UN/NA number:** Not applicable

**Shipping name:** Not Regulated

**Hazard class:** Not applicable

**Packing group:** Not applicable

**Reportable Quantity:** No

**Marine pollutant:** No

**Exceptions:** Not applicable

**2012 ERG Guide #:** Not applicable

A chemical is considered to be listed if the CAS number for the anhydrous form is on the Inventory list.

Component	TSCA	CERCLA (RQ)	RCRA code	DSL	NDSL	WHMIS Classification
Cetyl alcohol	Listed	Not listed	Not listed	Listed	Not listed	(T) D2B

## Section 13 Disclaimer

The information contained herein is furnished without warranty of any kind. Employers should use this information only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees. NTP: National Toxicology Program, IARC: International Agency for Research on Cancer, OSHA: Occupational Safety and Health Administration, STOT: Specific Target Organ Toxicity, SE: Single Exposure, RE: Repeated Exposure, ERG: Emergency Response Guidebook.

**Section 1 Chemical Product and Company Information** Page 1 of 52



5100 West Henrietta Rd  
 PO Box 92912  
 Rochester, NY 14692-9012  
 Tel: (800) 962-2660

**CHEMTREC 24 Hour Emergency**  
**Phone Number (800) 424-9300**  
 For laboratory use only.  
 Not for drug, food or household use.

<b>Product</b>	CHARCOAL, ACTIVATED
<b>Synonyms</b>	Activated Carbon

**Section 2 Hazards Identification**

This substance or mixture has not been classified as hazardous according to the Globally Harmonized System (GHS) of Classification and Labeling of Chemicals.

**Signal word:** None required  
**Pictograms:** No symbol required  
**Target organs:** None known

**GHS Classification:** None required  
**GHS Label information: Hazard statement:** None required  
**Precautionary statement:** None required

**Supplemental information:**  
 Do not breathe dust. Do not get in eyes, on skin, or on clothing. Wear protective gloves/protective clothing/eye protection/face protection. Wash hands thoroughly after handling. Get medical attention if you feel unwell.

Ca Prop 65 - This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm.

**Section 3 Composition information on ingredients**

Chemical Name	CAS #	%	EINECS
Activated carbon	7440-44-0	100%	231-153-3

**Section 4 First Aid Measures**

**INGESTION:** MAY BE HARMFUL IF SWALLOWED. Call physician or Poison Control Center immediately. Induce vomiting only if advised by appropriate medical personnel. Never give anything by mouth to an unconscious person.

**INHALATION:** MAY BE HARMFUL IF INHALED. CAUSES RESPIRATORY TRACT IRRITATION. Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

**EYE CONTACT:** MAY CAUSE EYE IRRITATION. Check for and remove contact lenses. Flush thoroughly with water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get immediate medical attention.

**SKIN ABSORPTION:** MAY BE HARMFUL IF ABSORBED THROUGH SKIN. MAY CAUSE SKIN IRRITATION. Remove contaminated clothing. Flush thoroughly with mild soap and water. If irritation occurs, get medical attention.

**Section 5 Fire Fighting Measures**

**Suitable Extinguishing Media:** Carbon dioxide, dry chemical, dry sand, alcohol foam.

**Protective Actions for Fire-fighters:** In fire conditions, wear a NIOSH/MSHA-approved self-contained breathing apparatus and full protective gear. Use water spray to keep fire-exposed containers cool.

**Specific Hazards:** During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Dust dispersed in air becomes explosive when exposed to ignition source.

**Section 6 Accidental Release Measures**

**Personal Precautions:** Evacuate personnel to safe area. Use proper personal protective equipment as indicated in Section 8. Provide adequate ventilation.

**Environmental Precautions:** Avoid runoff into storm sewers and ditches which lead to waterways.

**Containment and Cleanup:** Remove all sources of ignition. Sweep or vacuum up and place in a suitable container for proper disposal. Wash spill area with soap and water.

**Section 7 Handling & Storage**

**Precautions for Safe Handling:** Read label on container before using. Do not wear contact lenses when working with chemicals. Keep out of reach of children. Avoid contact with eyes, skin and clothing. Do not inhale dusts. Use with adequate ventilation. Avoid ingestion. Wash thoroughly after handling. Remove and wash clothing before reuse.

**Conditions for Safe Storage:** Store in a cool, dry, well-ventilated area away from incompatible substances. Keep away from ignition sources.

**Section 8 Exposure Controls / Personal Protection**

Exposure Limits:	Chemical Name	ACGIH (TLV)	OSHA (PEL)	NIOSH (REL)
	Particulates not otherwise classified	TWA: 5 mg/m <sup>3</sup> Respirable fraction	None established	None established

**Engineering controls:** Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower and fire extinguishing material. Personnel should wear safety glasses, goggles, or faceshield, lab coat or apron, appropriate protective gloves. Use adequate ventilation to keep airborne concentrations low.

**Respiratory protection:** None should be needed in normal laboratory handling at room temperatures. If dusty conditions prevail, work in fume hood or wear a NIOSH/MSHA-approved respirator.

**Section 9 Physical & Chemical Properties**

**Appearance:** Solid. Black powder.  
**Odor:** No odor.  
**Odor threshold:** Data not available.  
**pH:** Data not available  
**Melting / Freezing point:** Data not available  
**Boiling point:** Data not available  
**Flash point:** Combustible

**Evaporation rate ( = 1):** Data not available  
**Flammability (solid/gas):** Data not available.  
**Explosion limits: Lower / Upper:** Data not available  
**Vapor pressure (mm Hg):** Data not available  
**Vapor density (Air = 1):** Data not available  
**Relative density (Specific gravity):** 0.4 - 0.7 g/cc  
**Solubility(ies):** Insoluble in water.

**Partition coefficient:** Data not available  
**Auto-ignition temperature:** Data not available  
**Decomposition temperature:** Data not available  
**Viscosity:** Data not available.  
**Molecular formula:** C  
**Molecular weight:** 12.01

**Section 10 Stability & Reactivity**

**Chemical stability:** Stable  
**Conditions to avoid:** Stable under normal fire conditions.  
**Incompatible materials:** Strong oxidizers.  
**Hazardous decomposition products:** Oxides of carbon.

**Hazardous polymerization:** Will not occur.

**Section 11 Toxicological Information**

**Acute toxicity:** Oral-rat LD50: 10,000 mg/kg ; Inhalation-rat LC50: >64.4 mg/l  
**Skin corrosion/irritation:** Data not available  
**Serious eye damage/irritation:** Data not available  
**Respiratory or skin sensitization:** Data not available  
**Germ cell mutagenicity:** Data not available  
**Carcinogenicity:** Data not available  
**NTP:** No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.  
**IARC:** No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.  
**OSHA:** No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.  
**Reproductive toxicity:** Data not available  
**STOT-single exposure:** The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with respiratory effects.  
**STOT-repeated exposure:** Data not available  
**Aspiration hazard:** Data not available  
**Potential health effects:**  
 Inhalation: Material may be irritating to mucous membranes and upper respiratory tract. May be harmful if inhaled.  
 Ingestion: May be harmful if swallowed.  
 Skin: May cause skin irritation. May be harmful if absorbed through the skin.  
 Eyes: May cause eye irritation.  
**Signs and symptoms of exposure:** To the best of our knowledge, the chemical, physical and toxicological properties have not been thoroughly investigated.  
**Additional information:** RTECS #: FF5250100

**Section 12 Ecological Information**

**Toxicity to fish:** No data available  
**Toxicity to daphnia and other aquatic invertebrates:** No data available  
**Toxicity to algae:** No data available  
**Persistence and degradability:** No data available  
**Mobility in soil:** No data available  
**Other adverse effects:** An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

**Bioaccumulative potential:** No data available

**PBT and vPvB assessment:** No data available

**Section 13 Disposal Information**

These disposal guidelines are intended for the disposal of catalog-size quantities only. Federal regulations may apply to empty container. State and/or local regulations may be different. Dispose of in accordance with all local, state and federal regulations or contract with a licensed chemical disposal agency.

**Section 14 Transport Information**

**UN/NA number:** Not applicable  
**Hazard class:** Not applicable  
**Exceptions:** Not applicable  
**Shipping name:** Not Regulated  
**Packing group:** Not applicable  
**2012 ERG Guide #:** Not applicable  
**Reportable Quantity:** No  
**Marine pollutant:** No

**Section 15 Regulatory Information**

A chemical is considered to be listed if the CAS number for the anhydrous form is on the Inventory list.

Component	TSCA	CERLCA (RQ)	RCRA code	DSL	NDSL	WHMIS Classification
Activated carbon	Listed	Not listed	Not listed	Listed	Not listed	Uncontrolled product

**Section 16 Additional Information**

The information contained herein is furnished without warranty of any kind. Employers should use this information only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees. NTP: National Toxicology Program, IARC: International Agency for Research on Cancer, OSHA: Occupational Safety and Health Administration, STOT: Specific Target Organ Toxicity, SE: Single Exposure, RE: Repeated Exposure, ERG: Emergency Response Guidebook.

# SAFETY DATA SHEET

A product of Neutron Industries  
7107 N. Black Canyon Highway  
Phoenix, AZ 85021  
To order, call: 1-800-421-8481  
www.ni-712.com



## 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: CHERRY CHARM with CITRONELLA  
Product Description: Airborne odor eliminator.  
EPA Registration Number: NA

24 Hour Emergency CHEMTREC Number: 800-424-9300  
MSDS Number: M00108  
EPA Establishment Number: NA

## 2. HAZARDS IDENTIFICATION

\*\*\*EMERGENCY OVERVIEW\*\*\*

FIFRA Hazard Classification:  
Not Applicable

Skin corrosion/irritation: Category 2  
Serious eye damage/eye irritation: Category 2A  
Acute toxicity; oral: Category 5



Exclamation  
mark

WARNING

Hazard Statements:

H315 Causes skin irritation. H319\_3 Causes serious eye irritation. H303 May be harmful if swallowed.

Precautionary Statements:

P264 Wash hands thoroughly after handling. P280 Wear protective gloves, protective clothing, and eye protection.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

<u>Hazardous Ingredients</u>	<u>CAS Number</u>	<u>Weight</u>	<u>ACGIH</u>	<u>OSHA</u>
Citronella Oil	8000-29-1	<3.0%	NA	NA
Methylchloroisothiazolinone	26172-55-4	<1.0%	NE	NE
Methylisothiazolinone	2682-20-4	<1.0%	NE	NE

The exact percentages have  
been withheld as a trade secret.

## 4. FIRST AID MEASURES

P337+P313 IF eye irritation persists: Get medical advice. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P302+P352 IF ON SKIN: Wash with plenty of soap and water. P332+P313 IF SKIN irritation occurs: Get medical attention. P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. P361+P364 Take off immediately all contaminated clothing and wash it before reuse.

## 5. FIRE FIGHTING MEASURES

Flashpoint(Method): None to boiling point  
Lower Explosive Limit(LEL): NA Upper Explosive Limit(UEL): NA Autoignition Temperature: NA  
Flammable Properties: None Expected  
Extinguishing Media: Carbon Dioxide, dry chemical, foam.  
Fire Fighting Instructions: Wear a self-contained breathing apparatus with full protective clothing.

## 6. ACCIDENTAL RELEASE MEASURES

Ventilate area. Halt spill at source, dike and contain spill. Flush with plenty of water to drain. Dispose of in accordance with Federal, State and Local Regulations regarding waste disposal.

## 7. HANDLING AND STORAGE

P405 Store locked up.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls: Use general or local ventilation to keep exposure levels below exposure limits.

Personal Protective Equipment:

Respiratory: Normal room ventilation is adequate. Use a NIOSH/MHSA approved respirator if exposure limits are exceeded.

Eye: Wear approved safety glasses or goggles with unperforated eyeshields where splashing may occur.

Skin: For repeated or prolonged contact, wear chemically impervious gloves such as Nitrile.

Other: An emergency eyewash station or source of clean potable water should be available in case of accidental eye contact.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

Appearance: red-blue  
Physical State: Liquid.  
Solubility in Water: NA  
Boiling Point: NA  
Freezing Point: NA  
Melting Point: NA

Odor: Cherry  
pH: NA  
Diluted pH: NA  
Specific Gravity: NA  
VOC Content: 10%

**10. STABILITY AND REACTIVITY**

Stability: Stable  
Hazardous Polymerization: Will not occur.  
Conditions to Avoid: Do not mix with any other chemicals.  
Incompatibility: Solvents, caustics, acids or oxidizers  
Hazardous Decomposition Products: Carbon Dioxide, Carbon Monoxide, Oxides of Nitrogen.

**11. TOXICOLOGICAL INFORMATION**

This product contains no ingredient at 0.1% or greater that is listed as a human carcinogen.

<u>Hazardous Ingredients</u>	<u>CAS Number</u>	<u>LD50</u>	<u>LC50</u>
Citronella Oil	8000-29-1	NE	NE
Methylchloroisoithiazolinone	26172-55-4	NE	NE
Methylisothiazolinone	2682-20-4	NE	NE

**12. ECOLOGICAL INFORMATION**

The product is not expected to be hazardous to the environment.

**13. DISPOSAL CONSIDERATIONS**

P501 Dispose of container in accordance with all Federal, State and Local Regulations regarding waste disposal.

**14. TRANSPORT INFORMATION**

DOT Shipping Data: Not Regulated  
Canadian TDG: Not Available for sale in Canada.  
For International Shipments by Air: Not Regulated  
For International Shipments by Vessel: Not Regulated

**15. REGULATORY INFORMATION**

TSCA: All ingredients in this product are listed or exempt from listing on the TSCA Chemical Inventory.  
CEPA: All ingredients in this product are listed or exempt from listing on the Canadian DSL/NDL.  
Proposition 65: Raw materials used in this product have identified the opportunity for the presence of very low levels of the following California Proposition 65 chemicals known to the state of California to cause cancer, birth defects or other reproductive harm: Ethylene Oxide (75-21-8).  
SARA 313: This product contains no toxic chemicals subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 (40CFR372).  
VOC: 10%

HMIS RATING: HEALTH = 1 FLAMMABILITY = 0 REACTIVITY = 0 PPE = A

WHMIS RATING: Not available for sale in Canada

**16. OTHER INFORMATION**

NA = Not Available or Not Applicable  
NE = Not Established

Read and follow all label directions and precautions before using the product. This product is intended for industrial and institutional use only. NOT FOR HOUSEHOLD USE OR RESALE. KEEP OUT OF THE REACH OF CHILDREN. While we believe that the data contained herein is factual and the opinions expressed are those of qualified experts, the data are not to be taken as a warranty or representation for which the company assumes legal responsibility. They are offered solely for your consideration, investigation, and verification. Any use of these data and information must be determined by the user to be in accordance with applicable Federal, State, and Local Laws and regulations.

Prepared On: 03/24/2016 Replaces: 12/01/2013

**Section 1 Chemical Product and Company Information**

Page E1 of E2



5100 West Hennetta Rd  
PO Box 92912  
Rochester, NY 14692-9012  
Tel: (800) 962-2660

**CHEMTREC 24 Hour Emergency**  
**Phone Number (800) 424-9300**  
For laboratory use only.  
Not for drug, food or household use.

**Product** CHLORINE WATER, SATURATED

**Synonyms** Chlorine Test Solution

**Section 2 Hazards Identification**

**Signal word:** DANGER

**Pictograms:** GHS06 / GHS09

**Target organs:** Digestive and respiratory tracts



**GHS Classification:**

Skin irritation (Category 2)

Eye irritation (Category 2B)

Acute toxicity, inhalation (Category 3)

STOT-SE (Category 3)

Aquatic acute (Category 1)

**GHS Label information: Hazard statement:**

H315: Causes skin irritation.

H319: Causes serious eye irritation.

H331: Toxic if inhaled.

H335: May cause respiratory irritation.

H400: Very toxic to aquatic life.

**Precautionary statement:**

P261: Avoid breathing mist/vapours/spray.

P264: Wash hands thoroughly after handling.

P271: Use only outdoors or in a well-ventilated area.

P273: Avoid release to the environment.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

P302+P352: IF ON SKIN: Wash with plenty of water and soap.

P332+P313: If skin irritation occurs: Get medical attention.

P362+P364: Take off contaminated clothing and wash it before reuse.

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

P337+P313: If eye irritation persists: Get medical attention.

P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P311: Call a POISON CENTER or doctor.

P391: Collect spillage.

P403+P233: Store in a well-ventilated place. Keep container tightly closed.

P405: Store locked up.

P501: Dispose of contents/container to a licensed chemical disposal agency in accordance with local/regional/national regulations.

Ca Prop 65: This product does not contain any chemicals known to the State of California to cause cancer or reproductive toxicity.

**Section 3 Composition / Information on Ingredients**

Chemical Name	CAS #	%	EINECS
Water	7732-18-5	99.4%	231-791-2
Chlorine gas	7782-50-5	0.6%	231-959-5

**Section 4 First Aid Measures**

**INGESTION:** HARMFUL IF SWALLOWED. Call physician or Poison Control Center immediately. Induce vomiting only if advised by appropriate medical personnel. Never give anything by mouth to an unconscious person.

**INHALATION:** TOXIC IF INHALED. MAY CAUSE RESPIRATORY TRACT IRRITATION. Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

**EYE CONTACT:** CAUSES SERIOUS EYE IRRITATION. Check for and remove contact lenses. Flush thoroughly with water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get immediate medical attention.

**SKIN ABSORPTION:** CAUSES SKIN IRRITATION. Remove contaminated clothing. Flush thoroughly with mild soap and water. If irritation occurs, get medical attention.

**Section 5 Fire Fighting Measures**

**Suitable Extinguishing Media:** Use any media suitable for extinguishing supporting fire.

**Protective Actions for Fire-fighters:** In fire conditions, wear a NIOSH/MSHA-approved self-contained breathing apparatus and full protective gear. Use water spray to keep fire-exposed containers cool.

**Specific Hazards:** During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Liberates toxic chlorine gas when heated above 20°C (68°F).

**Section 6 Accidental Release Measures**

**Personal Precautions:** Evacuate personnel to safe area. Use proper personal protective equipment as indicated in Section 8. Provide adequate ventilation.

**Environmental Precautions:** Avoid runoff into storm sewers and ditches which lead to waterways.

**Containment and Cleanup:** Absorb with inert dry material, sweep or vacuum up and place in a suitable container for proper disposal. Wash spill area with soap and water.

**Section 7 Handling & Storage**

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**Precautions for Safe Handling:** Read label on container before using. Do not wear contact lenses when working with chemicals. Keep out of reach of children. Avoid contact with eyes, skin and clothing. Do not inhale vapors, spray or mist. Use with adequate ventilation. Avoid ingestion. Wash thoroughly after handling. Remove and wash clothing before reuse.

**Conditions for Safe Storage:** Store in a cool, well-ventilated area away from incompatible substances.

**Section 8 Exposure Controls / Personal Protection**

Exposure Limits:	Chemical Name	ACGIH (TLV)	OSHA (PEL)	NIOSH (REL)
	Chlorine	TWA: 0.5 ppm / 1.5 mg/m <sup>3</sup> (A4)	STEL: C 1 ppm / C 3 mg/m <sup>3</sup>	STEL: C 0.5 ppm / C 1.45 mg/m <sup>3</sup>

**Engineering controls:** Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower and fire extinguishing material. Personnel should wear safety glasses, goggles, or faceshield, lab coat or apron, appropriate protective gloves. Use adequate ventilation to keep airborne concentrations low.

**Respiratory protection:** None should be needed in normal laboratory handling at room temperatures. If misty conditions prevail, work in fume hood or wear a NIOSH/MSHA-approved respirator.

**Section 9 Physical & Chemical Properties**

<b>Appearance:</b> Liquid. Pale yellow	<b>Evaporation rate ( Ether = 1):</b> >1	<b>Partition coefficient:</b> Data not available
<b>Odor:</b> Chlorine odor	<b>Flammability (solid/gas):</b> Data not available	<b>Auto-ignition temperature:</b> Data not available
<b>Odor threshold:</b> Data not available	<b>Explosion limits: Lower / Upper:</b> Data not available	<b>Decomposition temperature:</b> Data not available
<b>pH:</b> Data not available	<b>Vapor pressure (mm Hg):</b> Unknown	<b>Viscosity:</b> Data not available
<b>Melting / Freezing point:</b> 0°C (32°F)	<b>Vapor density (Air = 1):</b> Unknown	<b>Molecular formula:</b> Mixture
<b>Boiling point:</b> Decomposes	<b>Relative density (Specific gravity):</b> 1.02	<b>Molecular weight:</b> Mixture
<b>Flash point:</b> Data not available	<b>Solubility(ies):</b> Soluble in water	

**Section 10 Stability & Reactivity**

**Chemical stability:** Stable      **Hazardous polymerization:** Will not occur.

**Conditions to avoid:** Excessive temperatures and heat.

**Incompatible materials:** Hydrogen, may form explosive mixtures. Ether, ammonia, turpentine, hydrocarbons and powdered metals.

**Hazardous decomposition products:** Chlorine gas.

**Section 11 Toxicological Information**

**Acute toxicity:** Data not available

**Skin corrosion/irritation:** Data not available

**Serious eye damage/irritation:** Data not available

**Respiratory or skin sensitization:** Data not available

**Germ cell mutagenicity:** Data not available

**Carcinogenicity:** Data not available

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Ca Prop 65: This product does not contain any chemicals known to the State of California to cause cancer or reproductive toxicity.

**Reproductive toxicity:** Data not available

**STOT-single exposure:** Data not available

**STOT-repeated exposure:** Data not available

**Aspiration hazard:** Data not available

**Potential health effects:**

Inhalation: Harmful if inhaled. Can cause fatal pulmonary edema.

Ingestion: Harmful if swallowed.

Skin: Causes skin irritation.

Eyes: Causes serious eye irritation.

**Signs and symptoms of exposure:** Exercise appropriate procedures to minimize potential hazards.

**Additional information:** RTECS #: FO2100000 [Chlorine gas]

**Section 12 Ecological Information**

**Toxicity to fish:** No data available

**Toxicity to daphnia and other aquatic invertebrates:** No data available

**Toxicity to algae:** No data available

**Persistence and degradability:** No data available      **Bioaccumulative potential:** No data available

**Mobility in soil:** No data available      **PBT and vPvB assessment:** No data available

**Other adverse effects:** An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

**Section 13 Disposal Considerations**

These disposal guidelines are intended for the disposal of catalog-size quantities only. Federal regulations may apply to empty container. State and/or local regulations may be different. Dispose of in accordance with all local, state and federal regulations or contract with a licensed chemical disposal agency.

**Section 14 Transport Information (US DOT / CANADA TDG)**

**UN/NA number:** UN1760      **Shipping name:** Corrosive liquids, n.o.s., (Chlorine water solution)

**Hazard class:** 8      **Packing group:** III      **Reportable Quantity:** 10 lbs. (4.54 kg)      **Marine pollutant:** Listed

**Exceptions:** Limited quantity equal to or less than 5 L      **2012 ERG Guide #** 154

**Section 15 Regulatory Information**

A chemical is considered to be listed if the CAS number for the anhydrous form is on the Inventory list.

Component	TSCA	CERCLA (RQ)	RCRA code	DSL	NDSL	WHMIS Classification
Chlorine	Listed	10 lbs. (4.54 kg)	Not listed	Listed	Not listed	D1A; E

**Section 16 Additional Information**

The information contained herein is furnished without warranty of any kind. Employers should use this information only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees. NTP: National Toxicology Program, IARC: International Agency for Research on Cancer, OSHA: Occupational Safety and Health Administration, STOT: Specific Target Organ Toxicity, SE: Single Exposure, RE: Repeated Exposure, ERG: Emergency Response Guidebook.

Revision Date: March 4, 2014

Supersedes: March 4, 2014

# Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 12.12.2016

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## Chloroplatinic Acid

### SECTION 1: Identification

#### Product identifier

**Product name:** Chloroplatinic Acid

**Product code:** KEMCP2001-AA

#### Recommended use of the product and restriction on use

**Relevant identified uses:** Laboratory chemicals

**Uses advised against:** Not determined or not applicable.

**Reasons why uses advised against:** Not determined or not applicable.

#### Manufacturer or supplier details

<b>Manufacturer:</b>	<b>Supplier:</b>
<b>United States</b>	<b>United States</b>
AquaPhoenix Scientific	AquaPhoenix Scientific Inc.
860 Gitts Run Road	860 Gitts Run Road
Hanover	Hanover
PA 17331	PA 17331
(717) 632-1291	(717) 632-1291

#### Emergency telephone number:

**United States**

Emergency Telephone No.: 800-255-3924

### SECTION 2: Hazard(s) identification

#### GHS classification:

Skin corrosion, category 1A

Skin sensitization, category 1

Respiratory sensitization, category 1

#### Label elements

##### Hazard pictograms:



**Signal word:** Danger

#### Hazard statements:

H314 Causes severe skin burns and eye damage.

H317 May cause an allergic skin reaction.

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

#### Precautionary statements:

P260 Do not breathe dust/fume/gas/mist/vapors/spray.

P264 Wash skin thoroughly after handling.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P272 Contaminated work clothing should not be allowed out of the workplace.

P285 In case of inadequate ventilation wear respiratory protection.

P321 Specific treatment (see supplemental first aid instructions on this label).

P363 Wash contaminated clothing before reuse.



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## Chloroplatinic Acid

P304+P340+P310 If inhaled: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a poison center or doctor/physician.

P301+P330+P331+P310 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor/physician.

P303+P361+P353+P310 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Immediately call a POISON CENTER or doctor/physician.

P305+P351+P338+P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.

P302+P352 If on skin: Wash with soap and water.

P333+P313 If skin irritation or a rash occurs: Get medical advice/attention.

P405 Store locked up.

P501 Dispose of contents and container as instructed in Section 13.

**Hazards not otherwise classified:** None

## SECTION 3: Composition/information on ingredients

Identification	Name	Weight %
CAS number: 7732-18-5	Water	99.9
CAS number: 18497-13-7	Chloroplatinic Acid	0.1

**Additional Information:** None

## SECTION 4: First aid measures

### Description of first aid measures

#### General notes:

Not determined or not applicable.

#### After inhalation:

Move exposed individual to fresh air

Loosen clothing as necessary and position individual in a comfortable position

Immediately call a POISON CONTROL CENTER or seek medical attention

#### After skin contact:

Immediately remove all contaminated clothing

Wash affected area with soap and water

Immediately call a POISON CONTROL CENTER or seek medical attention

#### After eye contact:

Rinse/flush exposed eye(s) gently using water for 15-20 minutes

Remove contact lens(es) if able to do so during rinsing

Immediately call a POISON CONTROL CENTER or seek medical attention

#### After swallowing:

Immediately call a POISON CONTROL CENTER or seek medical attention

Do not induce vomiting

Rinse mouth and then drink plenty of water

### Most important symptoms and effects, both acute and delayed

#### Acute symptoms and effects:

Not determined or not applicable.

#### Delayed symptoms and effects:

# Safety Data Sheet

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## Chloroplatinic Acid

Not determined or not applicable.

### Immediate medical attention and special treatment

#### Specific treatment:

Not determined or not applicable.

#### Notes for the doctor:

Not determined or not applicable.

## SECTION 5: Firefighting measures

### Extinguishing media

#### Suitable extinguishing media:

Use appropriate fire suppression agents for adjacent combustible materials or sources of ignition

#### Unsuitable extinguishing media:

Not determined or not applicable.

### Specific hazards during fire-fighting:

Thermal decomposition can lead to release of irritating gases and vapors

### Special protective equipment for firefighters:

Wear protective eye wear, gloves and clothing

Refer to Section 8

Use typical firefighting equipment, self-contained breathing apparatus, special tightly sealed suit

### Special precautions:

Heating causes a rise in pressure, risk of bursting and combustion

Shut off sources of ignition

Carbon monoxide and carbon dioxide may form upon combustion

## SECTION 6: Accidental release measures

### Personal precautions, protective equipment and emergency procedures:

Ensure adequate ventilation

Ensure air handling systems are operational

Wear protective eye wear, gloves and clothing

### Environmental precautions:

Should not be released into the environment

Prevent from reaching drains, sewer or waterway

### Methods and material for containment and cleaning up:

Absorb with non-combustible liquid-binding material (sand, diatomaceous earth (clay), acid binders, universal binders)

Dispose of contents / container in accordance with local regulations

### Reference to other sections:

Not determined or not applicable.

## SECTION 7: Handling and storage

### Precautions for safe handling:

Do not eat, drink, smoke or use personal products when handling chemical substances.

Avoid breathing mist or vapor.

Use only with adequate ventilation.

### Conditions for safe storage, including any incompatibilities:

Store in a cool, well-ventilated area.

Store away from foodstuffs.

# Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 12.12.2016

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## Chloroplatinic Acid

### SECTION 8: Exposure controls/personal protection

Only those substances with limit values have been included below.

#### Occupational Exposure limit values:

Country (Legal Basis)	Substance	Identifier	Permissible concentration
ACGIH	Chloroplatinic Acid	18497-13-7	ACGIH TLV: 0.002 mg/m <sup>3</sup> as Pt
United States (OSHA)	Chloroplatinic Acid	18497-13-7	OSHA PEL TWA value 0.002 mg/m <sup>3</sup> as Pt

#### Biological limit values:

No biological exposure limits noted for the ingredient(s).

#### Information on monitoring procedures:

Not determined or not applicable.

#### Appropriate engineering controls:

Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use or handling.

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapor and mists below the applicable workplace exposure limits (Occupational Exposure Limits-OELs) indicated above.

#### Personal protection equipment

##### Eye and face protection:

Safety goggles or glasses, or appropriate eye protection.

##### Skin and body protection:

Select glove material impermeable and resistant to the substance.

##### Respiratory protection:

When necessary, use NIOSH-approved breathing equipment.

#### General hygienic measures:

Wash hands before breaks and at the end of work.

Avoid contact with skin, eyes and clothing.

Perform routine housekeeping.

Wash contaminated clothing before reusing.

### SECTION 9: Physical and chemical properties

#### Information on basic physical and chemical properties

Appearance	Liquid
Odor	Odorless
Odor threshold	Not available
pH	Not available
Melting point/freezing point	Not available
Initial boiling point/range	Not available
Flash point (closed cup)	Not available
Evaporation rate	Not available
Flammability (solid, gas)	Not available
Upper flammability/explosive limit	Not available
Lower flammability/explosive limit	Not available
Vapor pressure	Not available
Vapor density	Not available

# Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 12.12.2016

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## Chloroplatinic Acid

Density	Not available
Relative density	Not available
Solubilities	Not determined or not available.
Partition coefficient (n-octanol/water)	Not available
Auto/Self-ignition temperature	Not available
Decomposition temperature	Not available
Dynamic viscosity	Not available
Kinematic viscosity	Not available
Explosive properties	Not determined or not available.
Oxidizing properties	Not determined or not available.

### Other information

## SECTION 10: Stability and reactivity

### Reactivity:

Does not react under normal conditions of use and storage.

### Chemical stability:

Stable under normal conditions of use and storage.

### Possibility of hazardous reactions:

None under normal conditions of use and storage.

### Conditions to avoid:

None known.

### Incompatible materials:

None known.

### Hazardous decomposition products:

None known.

## SECTION 11: Toxicological information

### Acute toxicity

**Assessment:** Based on available data, the classification criteria are not met.

**Product data:** No data available.

**Substance data:** No data available.

### Skin corrosion/irritation

**Assessment:** Causes severe skin burns and eye damage

**Product data:** No data available.

**Substance data:** No data available.

### Serious eye damage/irritation

**Assessment:** Based on available data, the classification criteria are not met.

**Product data:** No data available.

**Substance data:** No data available.

### Respiratory or skin sensitization

**Assessment:** May cause an allergic skin reaction May cause allergy or asthma symptoms or breathing difficulties if inhaled

**Product data:** No data available.

**Substance data:** No data available.

### Carcinogenicity

**Assessment:** Based on available data, the classification criteria are not met.

# Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 12.12.2016

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## Chloroplatinic Acid

**Product data:** No data available.

**Substance data:** No data available.

**International Agency for Research on Cancer (IARC):** None of the ingredients are listed.

**National Toxicology Program (NTP):** None of the ingredients are listed.

### Germ cell mutagenicity

**Assessment:** Based on available data, the classification criteria are not met.

**Product data:** No data available.

**Substance data:** No data available.

### Reproductive toxicity

**Assessment:** Based on available data, the classification criteria are not met.

**Product data:** No data available.

**Substance data:** No data available.

### Specific target organ toxicity (single exposure)

**Assessment:** Based on available data, the classification criteria are not met.

**Product data:** No data available.

**Substance data:** No data available.

### Specific target organ toxicity (repeated exposure)

**Assessment:** Based on available data, the classification criteria are not met.

**Product data:** No data available.

**Substance data:** No data available.

### Aspiration toxicity

**Assessment:** Based on available data, the classification criteria are not met.

**Product data:** No data available.

**Substance data:** No data available.

**Information on likely routes of exposure:** No data available.

**Symptoms related to the physical, chemical and toxicological characteristics:** No data available.

**Other information:** No data available.

## SECTION 12: Ecological information

### Acute (short-term) toxicity

**Assessment:** Based on available data, the classification criteria are not met.

**Product data:** No data available.

**Substance data:** No data available.

### Chronic (long-term) toxicity

**Product data:** No data available.

**Substance data:** No data available.

### Persistence and degradability

**Product data:** No data available.

**Substance data:** No data available.

### Bioaccumulative potential

**Product data:** No data available.

**Substance data:** No data available.

### Mobility in soil

**Product data:** No data available.

**Substance data:** No data available.

**Other adverse effects:** No data available.

## SECTION 13: Disposal considerations

# Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 12.12.2016

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## Chloroplatinic Acid

### Disposal methods:


It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities (US 40CFR262.11)

## SECTION 14: Transport information


### United States Transportation of dangerous goods (49 CFR DOT)

UN number	UN 2507
UN proper shipping name	Chloroplatinic acid, solid.
UN transport hazard class(es)	8 
Packing group	III
Environmental hazards	None
Special precautions for user	None

### International Maritime Dangerous Goods (IMDG)

UN number	UN 2507
UN proper shipping name	Chloroplatinic acid, solid.
UN transport hazard class(es)	8 
Packing group	III
Environmental hazards	None
Special precautions for user	None

### International Air Transport Association Dangerous Goods Regulations (IATA-DGR)

UN number	UN 2507
UN proper shipping name	Chloroplatinic acid, solid.
UN transport hazard class(es)	8 
Packing group	III
Environmental hazards	None
Special precautions for user	None

### Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Bulk Name	None
Ship type	None
Pollution category	None

## SECTION 15: Regulatory information

### United States regulations

#### Inventory listing (TSCA):

7732-18-5	Water	Listed
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# Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 12.12.2016

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## Chloroplatinic Acid

18497-13-7	Chloroplatinic Acid	Not Listed
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**Significant New Use Rule (TSCA Section 5):** Not determined.

**Export notification under TSCA Section 12(b):** Not determined.

**SARA Section 311/312 hazards:**

Acute	Chronic	Fire	Pressure	Reactive
No	No	No	No	No

**SARA Section 302 extremely hazardous substances:** Not determined.

**SARA Section 313 toxic chemicals:** Not determined.

**CERCLA:** Not determined.

**RCRA:** Not determined.

**Section 112(r) of the Clean Air Act (CAA):** Not determined.

**Massachusetts Right to Know:**

7732-18-5	Water	Not Listed
18497-13-7	Chloroplatinic Acid	Not Listed

**New Jersey Right to Know:**

7732-18-5	Water	Not Listed
18497-13-7	Chloroplatinic Acid	Not Listed

**New York Right to Know:**

7732-18-5	Water	Not Listed
18497-13-7	Chloroplatinic Acid	Not Listed

**Pennsylvania Right to Know:**

7732-18-5	Water	Not Listed
18497-13-7	Chloroplatinic Acid	Not Listed

**California Proposition 65:** Not determined.

## SECTION 16: Other information

**Abbreviations and Acronyms:** None

**Disclaimer:**

This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations. The responsibility to provide a safe workplace remains with the user. The user should consider the health hazards and safety information contained herein as a guide and should take those precautions required in an individual operation to instruct employees and develop work practice procedures for a safe work environment. The information contained herein is, to the best of our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by the use of this material. It is the responsibility of the user to comply with all applicable laws and regulations applicable to this material.

**NFPA:** 3-0-0

**HMIS:** 3-0-0

## Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 12.12.2016

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**Chloroplatinic Acid**

Initial preparation date: 12.12.2016

**End of Safety Data Sheet**



00673-XXXX

**SAFETY DATA SHEET (SDS)**MATERIAL NAME: **CHROMACRYL ACRYLIC ESSENTIALS**LAST REVISION: **2/27/2020****SECTION 1 – IDENTIFICATION****Material Name**

CHROMACRYL ACRYLIC ESSENTIALS

**Product Number**

Various

(All information the same for all colors and sizes.)

**Manufacturer Information**

Chroma Inc.

205 Bucky Drive

Lititz, Pennsylvania 17543

U.S.A.

Phone: 717-626-8866; 1-800-257-8278

Fax: 717-626-9292

Email: jhirneisen@chromaonline.com; infousa@chromaonline.com

For Transportation Emergencies Only: 1-800-257-8278

For Health Emergencies Call the Poison Control Center: 1-888-516-2502

Seek medical assistance for further treatment, observation and support, if necessary.

**SECTION 2 – HAZARDS IDENTIFICATION****Classification in accordance with paragraph (d) of 29 CFR 1910.1200.**

There are no GHS label elements.

**Primary Routes of Entry:** Inhalation, Ingestion, Eye, Skin**Effects and Symptoms of Acute Exposure:** None Expected**Effects and Symptoms of Chronic Exposure:** None Expected**Carcinogen Listing:** NTP: NO IARC: NO OSHA: NO

See Section 3 for Components Affected

**Medical Conditions Usually Aggravated by Over Exposure to this Product:** None**SECTION 3 – COMPOSITION / INFORMATION ON INGREDIENTS**

<b>Ingredient</b>	<b>CAS #</b>	<b>PEL/TLV (MG/M#)</b>	<b>Max % Weight</b>	<b>NTP</b>	<b>IARC</b>
NONE					

All Colors – Chromacryl Acrylic Essentials

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SDS Date 02/20

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**SECTION 4 – FIRST AID MEASURES**

<b>Skin</b>	Wash skin with soap and water or use a product specifically formulated for water based acrylic removal. If irritation persists seek medical help.
<b>Eye</b>	Check for and remove any contact lenses. Flush eyes up to 15 minutes with water, holding eye lids open. If irritation persists seek medical help.
<b>Inhalation</b>	If person is showing adverse effects, remove person to fresh air. Seek medical help if symptoms occur.
<b>Ingestion</b>	Treat Symptomatically. Never give anything by mouth to an unconscious person. Seek medical help if symptoms occur. If swallowed, call your Poison Control Center at 1-800-222-1222.

Seek medical assistance for further treatment, observation and support, if necessary.

**Advice to Doctor:**

This product carries the A.P. Seal, conforms to ASTM D4236, and is certified non-toxic by a toxicologist in association with the Art & Craft Materials Institute, Hanson, MA 02341 USA.

**SECTION 5 – FIRE FIGHTING MEASURES**

<b>Flash Point (Method):</b>	N/A
<b>Autoignition Temperature:</b>	N/A
<b>Explosion Limits in Air (% by Volume):</b>	Not Explosive
<b>Extinguishing Media:</b>	No Special Media Required
<b>Fire Fighting Procedures:</b>	No Special Fire Fighting Procedures Required
<b>Unusual Fire &amp; Explosion Hazards:</b>	Not Combustible

**SECTION 6 – ACCIDENTAL RELEASE MEASURES****Steps to be Taken in Case a Material is Spilled**

Clean up in accordance with all applicable regulations. Absorb spillage with non-combustible, absorbent material. For waste disposal, see Section 13.

**Large Spills:** Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb with dry earth, sand or other non-combustible material.

**Small Spills:** Mop up or absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Clean surface thoroughly to remove residual contamination. Never return spills to original containers for re-use.

**Environmental Precautions**

Avoid discharge into drains, water courses or onto the ground. Use appropriate containment to avoid environmental contamination.

All Colors – Chromacryl Acrylic Essentials

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SDS Date 02/20

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**SECTION 7 – HANDLING & STORAGE****Precautions for Safe Handling**

Good industrial hygiene practice requires that exposure be maintained below the TLV. This is preferably achieved through the provision of adequate ventilation. When exposure cannot be adequately controlled in this way, personal respiratory protection should be employed.

Avoid contact with eyes. Avoid skin contact.

Observe good hygiene practices; wash hands after use.

**Storage Requirements**

Store at room temperature; keep from freezing.

Recommended storage conditions are between 34° F and 122° F (1° C and 50° C).

Store in original tightly closed container.

**SECTION 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION**

**Respiratory Protection & Special Ventilation Requirements:** None needed under normal conditions of use

**Protective Gloves:** None needed under normal conditions of use

**Eye Protection:** None needed under normal conditions of use

**Other Protective Equipment:** None needed under normal conditions of use

**Engineering Controls:** None Required

**Hygienic Work Practices**

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking and/or smoking.

**SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES**

**Boiling Point:** N/A

**Vapor Pressure:** N/A

**Specific Vapor Density (AIR=1):** N/A

**Solubility in Water:** N/A

**Specific Gravity (H2O=1):** N/A

**Melting Point:** N/A

**Evaporation Rate:** Slower than Ether

**Reactivity in Water:** Non-Reactive

**Appearance & Odor:** Liquid acrylic paints in assorted colors. May have slight ammonia smell.

**SECTION 10 – STABILITY AND REACTIVITY**

**Stability (Conditions to Avoid):** None

**Incompatibility (Materials to Avoid):** None

**Hazardous Decomposition Products:** None

**Hazardous Polymerization Products:** None

**SECTION 11 – TOXICOLOGICAL INFORMATION**

**Acute Effects Associated with the use of this material:** None Expected

The summated LD50 is 21400 mg/kg.

The summated LC50 is 41684 mg/cubic meter.

This product is not considered to be a known or suspected human carcinogen by NTP, IARC or OSHA (see section 3)

All Colors – Chromacryl Acrylic Essentials

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SDS Date 02/20

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**SECTION 12 – ECOLOGICAL INFORMATION****Ecotoxicity**

The product is not classified as environmentally hazardous.  
No harmful effects known other than those associated with suspended inert solids in water.

**SECTION 13 – DISPOSAL CONSIDERATIONS**

**RCRA Hazard Class (40 CFR 261):** This product is not classified as hazardous waste.

**Waste Disposal Method**

Dispose of in accordance with International, Federal, State and Local regulations.

**SECTION 14 – TRANSPORTATION INFORMATION**

**U.S. DOT (49 CFR 172.101):** This product is not a hazardous material as classified by CFR 172.101.

**SECTION 15 – REGULATORY INFORMATION****US Federal Regulations**

Contents of this SDS comply with OSHA Hazard Communications Standard 29 CFR 1910.1200 EPA SARA TITLE III Chemical Listings: None

**Section 302.4 Extremely Hazardous Substances (40 CFR 355):** None

**Section 313 Toxic Chemicals (40 CFR 372):** None

**International Regulations****Canadian WHMIS:**

This product is a controlled product under Canada's Workplace Hazardous Materials Information System. It contains the following toxic or highly toxic materials:  
Ferric Oxide  
Pigment Red 2 Dispersion

**Supplemental State Compliance Information****US, New Jersey Right-to-Know**

This product contains the following chemical(s) listed under New Jersey's Right to Know Program:  
Ammonia Hydroxide  
Pigment Red 101  
Pigment Red 2 Dispersion

**US, Washington Children's Safe Products Act**

This product contains the following chemical(s) requiring notification to the State of Washington under their Children's Safe Products Act:  
None

**Under CPSC's consumer product regulations (16CFR1500.3 and 150014), this product has the following required acute and chronic hazard labeling:** None

All Colors – Chromacryl Acrylic Essentials

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SDS Date 02/20

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**SECTION 16 – OTHER INFORMATION**

All information the same for all colors and sizes.

This product does not contain egg, dairy, wheat, gluten, soy or peanut products, by-products or derivatives.

This product does not contain latex materials or animal derived ingredients.

All Colors – Chromacryl Acrylic Essentials

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SDS Date 02/20

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# SAFETY DATA SHEET (SDS)

MATERIAL NAME: CHROMACRYL STUDENTS' ACRYLIC

LAST REVISION: 01/16/2018

## SECTION 1 – IDENTIFICATION

### Material Name

CHROMACRYL STUDENTS' ACRYLIC

### Product Number

Various

(All information the same for all colors and sizes.)

### Manufacturer Information

Chroma, Inc.

Airport Industrial Park

205 Bucky Drive

Lititz, Pennsylvania 17543

U.S.A.

Phone: 717-626-8866; 1-800-257-8278

Fax: 717-626-9292

Email: jhirneisen@chromaonline.com; infousa@chromaonline.com

For Transportation Emergencies Only: 1-800-257-8278

For Health Emergencies Call the Poison Control Center: 1-888-516-2502

Seek medical assistance for further treatment, observation and support, if necessary.

## SECTION 2 – HAZARDS IDENTIFICATION

### Classification in accordance with paragraph (d) of 29 CFR 1910.1200.

There are no GHS label elements.

PRIMARY ROUTES OF ENTRY: INHALATION, INGESTION, EYE, SKIN

EFFECTS AND SYMPTOMS OF ACUTE EXPOSURE: NONE EXPECTED

EFFECTS AND SYMPTOMS OF CHRONIC EXPOSURE: NONE EXPECTED

CARCINOGEN LISTING: NTP: **NO** IARC: **NO** OSHA: **NO**

SEE SECTION 3 FOR COMPONENTS AFFECTED

MEDICAL CONDITIONS USUALLY AGGRAVATED BY OVER EXPOSURE TO THIS PRODUCT: NONE

## SECTION 3 – COMPOSITION / INFORMATION ON INGREDIENTS

<u>Ingredient</u>	<u>CAS #</u>	<u>PEL/TLV (MG/M#)</u>	<u>Max % Weight</u>	<u>NTP</u>	<u>IARC</u>
NONE					

#### **SECTION 4 – FIRST AID MEASURES**

FIRST AID MEASURES: NONE REQUIRED

NO ACUTE HEALTH EFFECTS EXPECTED.

#### **SECTION 5 – FIRE FIGHTING MEASURES**

FLASH POINT (METHOD): N/A

AUTOIGNITION TEMPERATURE: N/A

EXPLOSION LIMITS IN AIR (% BY VOLUME): NOT EXPLOSIVE

EXTINGUISHING MEDIA: NO SPECIAL MEDIA REQUIRED

FIRE FIGHTING PROCEDURES: NO SPECIAL FIRE FIGHTING PROCEDURES REQUIRED

UNUSUAL FIRE & EXPLOSION HAZARDS: NOT COMBUSTIBLE

#### **SECTION 6 – ACCIDENTAL RELEASE MEASURES**

STEPS TO BE TAKEN IN CASE A MATERIAL IS SPILLED:

Clean up in accordance with all applicable regulations. Absorb spillage with non-combustible, absorbent material. For waste disposal, see Section 13.

#### **SECTION 7 – HANDLING & STORAGE**

PRECAUTIONS TO BE TAKEN DURING STORAGE AND HANDLING:

Good industrial hygiene practice requires that exposure be maintained below the TLV. This is preferably achieved through the provision of adequate ventilation. When exposure cannot be adequately controlled in this way, personal respiratory protection should be employed.

#### **SECTION 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION**

RESPIRATORY PROTECTION AND SPECIAL VENTILATION REQUIREMENTS: NONE REQUIRED

OTHER PROTECTIVE EQUIPMENT (GLOVES, GOGGLES, ETC.): NONE REQUIRED

WORK / HYGIENE PRACTICES: NONE REQUIRED

ENGINEERING CONTROLS: NONE REQUIRED

#### **SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES**

BOILING POINT: N/A

MELTING POINT: N/A

VAPOR PRESSURE: N/A

SPECIFIC VAPOR DENSITY (AIR=1): N/A

SPECIFIC GRAVITY: N/A

SOLUBILITY IN WATER: N/A

REACTIVITY IN WATER: NON-REACTIVE

## **SECTION 10 – STABILITY AND REACTIVITY**

HAZARDOUS POLYMERIZATION PRODUCTS: NONE

STABILITY: STABLE CONDITIONS TO AVOID: NONE

INCOMPATIBILITY (MATERIALS TO AVOID): NONE

HAZARDOUS DECOMPOSITION PRODUCTS: NONE

## **SECTION 11 – TOXICOLOGICAL INFORMATION**

ACUTE EFFECTS ASSOCIATED WITH USE OF THIS MATERIAL: NONE EXPECTED

The summated LD50 is 21400 mg/kg.

The summated LC50 is 41684 mg/cubic meter.

This product is not considered to be a known or suspected human carcinogen by NTP, IARC or OSHA (see section 3)

## **SECTION 12 – ECOLOGICAL INFORMATION**

NO HARMFUL EFFECTS KNOWN OTHER THAN THOSE ASSOCIATED WITH SUSPENDED INERT SOLIDS IN WATER.

## **SECTION 13 – DISPOSAL CONSIDERATIONS**

RCRA HAZARD CLASS (40 CFR 261):

THIS PRODUCT IS NOT CLASSIFIED AS A HAZARDOUS WASTE.

WASTE DISPOSAL METHOD:

DISPOSE OF IN ACCORDANCE WITH FEDERAL, STATE AND LOCAL REGULATIONS.

## **SECTION 14 – TRANSPORTATION INFORMATION**

U.S. DOT (49 CFR 172.101): THIS IS NOT A HAZARDOUS MATERIAL AS CLASSIFIED BY CFR 172.101.

## **SECTION 15 – REGULATORY INFORMATION**

CONTENTS OF THIS SDS COMPLY WITH OSHA HAZARD COMMUNICATION STANDARD 29 CFR 1910.1200

EPA SARA TITLE III CHEMICAL LISTINGS

NONE

SECTION 302.4 EXTREMELY HAZARDOUS SUBSTANCES (40 CFR 355): NONE

SECTION 313 TOXIC CHEMICALS (40 CFR 372): NONE



## **INTERNATIONAL REGULATIONS**

CANADIAN WHMIS:

THIS PRODUCT IS A CONTROLLED PRODUCT UNDER CANADA'S WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM.

IT CONTAINS THE FOLLOWING TOXIC OR HIGHLY TOXIC MATERIALS:

FERRIC OXIDE  
PIGMENT RED 2 DISPERSION

## **SUPPLEMENTAL STATE COMPLIANCE INFORMATION**

THIS PRODUCT CONTAINS THE FOLLOWING CHEMICAL(S) LISTED UNDER NEW JERSEY'S RIGHT TO KNOW PROGRAM:

AMMONIUM HYDROXIDE  
PIGMENT RED 101  
PIGMENT RED 2 DISPERSION

THIS PRODUCT CONTAINS THE FOLLOWING CHEMICAL(S) REQUIRING NOTIFICATION TO THE STATE OF WASHINGTON UNDER THEIR CHILDREN'S SAFE PRODUCTS ACT:

NONE

Under CPSC's consumer product regulations (16CFR1500.3 and 150014), this product has the following required acute and chronic hazard labeling:

NONE

## **SECTION 16 – OTHER INFORMATION**

ALL INFORMATION THE SAME FOR ALL COLORS AND SIZES.

THIS PRODUCT DOES NOT CONTAIN EGG, DAIRY, WHEAT, GLUTEN, SOY OR PEANUT PRODUCTS, BY-PRODUCTS OR DERIVATIVES.

THIS PRODUCT DOES NOT CONTAIN LATEX MATERIALS OR ANIMAL DERIVED INGREDIENTS.

# SAFETY DATA SHEET (SDS)

MATERIAL NAME: CHROMATEMP ARTISTS' TEMPERA PAINT

LAST REVISION: 12/16/2015

## SECTION 1 – IDENTIFICATION

### Material Name

CHROMATEMP ARTISTS' TEMPERA PAINT

### Product Number

Various

(All information the same for all colors and sizes.)

### Manufacturer Information

Chroma, Inc.

Airport Industrial Park

205 Bucky Drive

Lititz, Pennsylvania 17543

U.S.A.

Phone: 717-626-8866; 1-800-257-8278

Fax: 717-626-9292

Email: jhirneisen@chromaonline.com; infousa@chromaonline.com

For Transportation Emergencies Only: 1-800-257-8278

For Health Emergencies Call the Poison Control Center: 1-888-516-2502

Seek medical assistance for further treatment, observation and support, if necessary.

## SECTION 2 – HAZARDS IDENTIFICATION

### Classification in accordance with paragraph (d) of 29 CFR 1910.1200.

There are no GHS label elements.

PRIMARY ROUTES OF ENTRY: INHALATION, INGESTION, EYE, SKIN

EFFECTS AND SYMPTOMS OF ACUTE EXPOSURE: NONE EXPECTED

EFFECTS AND SYMPTOMS OF CHRONIC EXPOSURE: NONE EXPECTED

CARCINOGEN LISTING: NTP: **NO** IARC: **NO** OSHA: **NO**

SEE SECTION 3 FOR COMPONENTS AFFECTED

MEDICAL CONDITIONS USUALLY AGGRAVATED BY OVER EXPOSURE TO THIS PRODUCT: NONE

## SECTION 3 – COMPOSITION / INFORMATION ON INGREDIENTS

<u>Ingredient</u>	<u>CAS #</u>	<u>PEL/TLV (MG/M#)</u>	<u>Max % Weight</u>	<u>NTP</u>	<u>IARC</u>
NONE					

#### **SECTION 4 – FIRST AID MEASURES**

FIRST AID MEASURES: NONE REQUIRED

NO ACUTE HEALTH EFFECTS EXPECTED.

#### **SECTION 5 – FIRE FIGHTING MEASURES**

FLASH POINT (METHOD): N/A

AUTOIGNITION TEMPERATURE: N/A

EXPLOSION LIMITS IN AIR (% BY VOLUME): NOT EXPLOSIVE

EXTINGUISHING MEDIA: NO SPECIAL MEDIA REQUIRED

FIRE FIGHTING PROCEDURES: NO SPECIAL FIRE FIGHTING PROCEDURES REQUIRED

UNUSUAL FIRE & EXPLOSION HAZARDS: NOT COMBUSTIBLE

#### **SECTION 6 – ACCIDENTAL RELEASE MEASURES**

STEPS TO BE TAKEN IN CASE A MATERIAL IS SPILLED:

Clean up in accordance with all applicable regulations. Absorb spillage with non-combustible, absorbent material. For waste disposal, see Section 13.

#### **SECTION 7 – HANDLING & STORAGE**

PRECAUTIONS TO BE TAKEN DURING STORAGE AND HANDLING:

Good industrial hygiene practice requires that exposure be maintained below the TLV. This is preferably achieved through the provision of adequate ventilation. When exposure cannot be adequately controlled in this way, personal respiratory protection should be employed.

#### **SECTION 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION**

RESPIRATORY PROTECTION AND SPECIAL VENTILATION REQUIREMENTS: NONE REQUIRED

OTHER PROTECTIVE EQUIPMENT (GLOVES, GOGGLES, ETC.): NONE REQUIRED

WORK / HYGIENE PRACTICES: NONE REQUIRED

ENGINEERING CONTROLS: NONE REQUIRED

#### **SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES**

BOILING POINT: N/A

MELTING POINT: N/A

VAPOR PRESSURE: N/A

SPECIFIC VAPOR DENSITY (AIR=1): N/A

SPECIFIC GRAVITY: N/A

SOLUBILITY IN WATER: N/A

REACTIVITY IN WATER: NON-REACTIVE

## **SECTION 10 – STABILITY AND REACTIVITY**

HAZARDOUS POLYMERIZATION PRODUCTS: NONE

STABILITY: STABLE CONDITIONS TO AVOID: NONE

INCOMPATIBILITY (MATERIALS TO AVOID): NONE

HAZARDOUS DECOMPOSITION PRODUCTS: NONE

## **SECTION 11 – TOXICOLOGICAL INFORMATION**

ACUTE EFFECTS ASSOCIATED WITH USE OF THIS MATERIAL: NONE EXPECTED

The summated LD50 is 21400 mg/kg.

The summated LC50 is 41684 mg/cubic meter.

This product is not considered to be a known or suspected human carcinogen by NTP, IARC or OSHA (see section 3)

## **SECTION 12 – ECOLOGICAL INFORMATION**

NO HARMFUL EFFECTS KNOWN OTHER THAN THOSE ASSOCIATED WITH SUSPENDED INERT SOLIDS IN WATER.

## **SECTION 13 – DISPOSAL CONSIDERATIONS**

RCRA HAZARD CLASS (40 CFR 261):

THIS PRODUCT IS NOT CLASSIFIED AS A HAZARDOUS WASTE.

WASTE DISPOSAL METHOD:

DISPOSE OF IN ACCORDANCE WITH FEDERAL, STATE AND LOCAL REGULATIONS.

## **SECTION 14 – TRANSPORTATION INFORMATION**

U.S. DOT (49 CFR 172.101): THIS IS NOT A HAZARDOUS MATERIAL AS CLASSIFIED BY CFR 172.101.

## **SECTION 15 – REGULATORY INFORMATION**

CONTENTS OF THIS SDS COMPLY WITH OSHA HAZARD COMMUNICATION STANDARD 29 CFR 1910.1200

EPA SARA TITLE III CHEMICAL LISTINGS

NONE

SECTION 302.4 EXTREMELY HAZARDOUS SUBSTANCES (40 CFR 355): NONE

SECTION 313 TOXIC CHEMICALS (40 CFR 372): NONE

## **INTERNATIONAL REGULATIONS**

CANADIAN WHMIS:

THIS PRODUCT COMPLIES WITH CANADA'S WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM.

IT CONTAINS NO TOXIC OR HIGHLY TOXIC MATERIALS

## **SUPPLEMENTAL STATE COMPLIANCE INFORMATION**

THIS PRODUCT CONTAINS THE FOLLOWING CHEMICAL(S) LISTED UNDER NEW JERSEY'S RIGHT TO KNOW PROGRAM:

AMMONIUM HYDROXIDE

THIS PRODUCT CONTAINS THE FOLLOWING CHEMICAL(S) REQUIRING NOTIFICATION TO THE STATE OF WASHINGTON UNDER THEIR CHILDREN'S SAFE PRODUCTS ACT:

NONE

Under CPSC's consumer product regulations (16CFR1500.3 and 150014), this product has the following required acute and chronic hazard labeling:

NONE

## **SECTION 16 – OTHER INFORMATION**

ALL INFORMATION THE SAME FOR ALL COLORS AND SIZES.

THIS PRODUCT DOES NOT CONTAIN EGG, DAIRY, WHEAT, GLUTEN, SOY OR PEANUT PRODUCTS, BY-PRODUCTS OR DERIVATIVES.

THIS PRODUCT DOES NOT CONTAIN LATEX MATERIALS OR ANIMAL DERIVED INGREDIENTS.

# Safety Data Sheet

## Chromatography Solvent (Methanol)

**CAROLINA**<sup>®</sup>  
www.carolina.com

### Section 1 Product Description

**Product Name:** Chromatography Solvent (Methanol)  
**Recommended Use:** Science education applications  
**Synonyms:** N/A  
**Distributor:** Carolina Biological Supply Company  
2700 York Road, Burlington, NC 27215  
1-800-227-1150  
**Chemical Information:** 800-227-1150 (8am-5pm (ET) M-F)  
**Chemtrec:** 800-424-9300 (Transportation Spill Response 24 hours)

### Section 2 Hazard Identification

Classification of the chemical in accordance with paragraph (d) of §1910.1200;

**DANGER**



Highly flammable liquid and vapor. Harmful in contact with skin. Causes damage to organs.

**GHS Classification:**

Specific Target Organ Systemic Toxicity (STOT) - Single Exposure Category 1, Flammable Liquid Category 2, Acute Toxicity - Dermal Category 4

**Other Safety Precautions:** IF exposed: Call a POISON CENTER or doctor/physician.

### Section 3 Composition / Information on Ingredients

<u>Chemical Name</u>	<u>CAS #</u>	<u>%</u>
Water	7732-18-5	74
Methanol	67-56-1	25
Potassium Phosphate, Dibasic	7758-11-4	1

### Section 4 First Aid Measures

**Emergency and First Aid Procedures**

**Inhalation:** In case of accident by inhalation: remove casualty to fresh air and keep at rest.  
**Eyes:** In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
**Skin Contact:** IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. IF ON SKIN: Wash with plenty of soap and water. Wash contaminated clothing before reuse.  
**Ingestion:** If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

### Section 5 Firefighting Procedures

**Extinguishing Media:** Use dry chemical, CO2 or appropriate foam.  
**Fire Fighting Methods and Protection:** Firefighters should wear full protective equipment and NIOSH approved self-contained breathing apparatus.  
**Fire and/or Explosion Hazards:** Vapors may travel back to ignition source. Closed Containers exposed to heat may explode. Fire or excessive heat may produce hazardous decomposition products.  
**Hazardous Combustion Products:** Carbon dioxide, Carbon monoxide

# Safety Data Sheet

## Section 6

## Spill or Leak Procedures

### Steps to Take in Case Material Is Released or Spilled:

Exposure to the spilled material may be severely irritating or toxic. Follow personal protective equipment recommendations found in Section 8 of this SDS. Personal protective equipment needs must be evaluated based on information provided on this sheet and the special circumstances created by the spill including; the material spilled, the quantity of the spill, the area in which the spill occurred, and the expertise of employees in the area responding to the spill. Never exceed any occupational exposure limits.

Prevent the spread of any spill to minimize harm to human health and the environment if safe to do so. Wear complete and proper personal protective equipment following the recommendation of Section 8 at a minimum. Dike with suitable absorbent material like granulated clay. Gather and store in a sealed container pending a waste disposal evaluation. Shut off ignition sources; including electrical equipment and flames. Do not allow smoking in the area.

## Section 7

## Handling and Storage

### Handling:

Keep away from heat/sparks/open flames/hot surfaces. – No smoking. Keep container tightly closed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting/.../ equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Do not breathe dust/fume/gas/mist/vapors/spray. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves/protective clothing/eye protection/face protection. Do not breathe dust/vapor. Do not get in eyes, on skin, or on clothing. Retained residue may make empty containers hazardous; use caution.

### Storage:

Keep container tightly closed. Store in a well-ventilated place. Keep cool. Store locked up. Keep container tightly closed in a cool, well-ventilated place.

### Storage Code:

Red - Flammables. Store in approved flammable containers. Store away from oxidizing materials.

## Section 8

## Protection Information

<u>Chemical Name</u>	<u>ACGIH</u>		<u>OSHA PEL</u>	
	<u>(TWA)</u>	<u>(STEL)</u>	<u>(TWA)</u>	<u>(STEL)</u>
Methanol	200 ppm TWA	250 ppm STEL	200 ppm TWA; 260 mg/m3 TWA	N/A

### Control Parameters

#### Engineering Measures:

Local exhaust ventilation or other engineering controls are normally required when handling or using this product to avoid overexposure.

#### Personal Protective Equipment (PPE):

Lab coat, apron, eye wash, safety shower.

#### Respiratory Protection:

No respiratory protection required under normal conditions of use. Wear a NIOSH approved respirator if levels above the exposure limits are possible.

#### Respirator Type(s):

NIOSH approved air purifying respirator with organic vapor cartridge and HEPA filter.

#### Eye Protection:

Wear chemical splash goggles when handling this product. Have an eye wash station available.

#### Skin Protection:

Avoid skin contact by wearing chemically resistant gloves, an apron and other protective equipment depending upon conditions of use. Inspect gloves for chemical break-through and replace at regular intervals. Clean protective equipment regularly. Wash hands and other exposed areas with mild soap and water before eating, drinking, and when leaving work.

#### Gloves:

Nitrile, Polyvinyl chloride, Natural rubber, Neoprene

## Section 9

## Physical Data

Formula: N/A

Molecular Weight: N/A

Appearance: Colorless

Odor: Moderate Alcohol Odor

Odor Threshold: No data available

pH: No data available

Melting Point: -98 C

Boiling Point: 65 C

Flash Point: 11 C

Flammable Limits in Air: 7.3% 36%

Vapor Pressure: 96 mm at 20 °C

Evaporation Rate (BuAc=1): 4.6

Vapor Density (Air=1): 1.11

Specific Gravity: 0.79

Solubility in Water: Soluble

Log Pow (calculated): No data available

Autoignition Temperature: No data available

Decomposition Temperature: No data available

Viscosity: No data available

Percent Volatile by Volume: 99%

## Section 10

## Reactivity Data

# Safety Data Sheet

**Reactivity:** No data available  
**Chemical Stability:** Stable under normal conditions.  
**Conditions to Avoid:** Temperatures above the high flash point of this combustible material in combination with sparks, open flames, or other sources of ignition.  
**Incompatible Materials:** Water-reactive materials, Acids, Strong oxidizing agents, Strong reducing agents, Magnesium  
**Hazardous Polymerization:** Will not occur

## Section 11 Toxicity Data

**Routes of Entry:** Inhalation, ingestion, eye or skin contact.  
**Symptoms (Acute):** N/A  
**Delayed Effects:** No data available

Acute Toxicity:	CAS Number	Oral LD50	Dermal LD50	Inhalation LC50
Chemical Name				
Water	7732-18-5	Oral LD50 Rat 90000 mg/kg		
Methanol	67-56-1	Oral LD50 Mouse 7300 mg/kg		INHALATION LC50 Rat 64000 ppm

Carcinogenicity:	CAS Number	IARC	NTP	OSHA
Chemical Name				
Methanol	67-56-1	Not listed	Not listed	Not listed

**Chronic Effects:**  
**Mutagenicity:** No evidence of a mutagenic effect.  
**Teratogenicity:** No evidence of a teratogenic effect (birth defect).  
**Sensitization:** No evidence of a sensitization effect.  
**Reproductive:** No evidence of negative reproductive effects.  
**Target Organ Effects:**  
**Acute:** See Section 2  
**Chronic:** Not listed as a carcinogen by IARC, NTP or OSHA.

## Section 12 Ecological Data

**Overview:** This material is not expected to be harmful to the ecology.  
**Mobility:** No data  
**Persistence:** Biodegradation  
**Bioaccumulation:** No data  
**Degradability:** No data  
**Other Adverse Effects:** No data

Chemical Name	CAS Number	Eco Toxicity
Water	7732-18-5	No data available
Methanol	67-56-1	96 HR LC50 PIMEPHALES PROMELAS > 100 MG/L [STATIC]

## Section 13 Disposal Information

**Disposal Methods:** Dispose in accordance with all applicable Federal, State and Local regulations. Always contact a permitted waste disposer (TSD) to assure compliance.  
**Waste Disposal Code(s):** Not Determined

## Section 14 Transport Information

**Ground - DOT Proper Shipping Name:** UN1230, Methanol, 3, PG II  
**Air - IATA Proper Shipping Name:** Not regulated for air transport by IATA.



# Safety Data Sheet

## Section 15

## Regulatory Information

**TSCA Status:** All components in this product are on the TSCA Inventory.

Chemical Name	CAS Number	§ 313 Name	§ 304 RQ	CERCLA RQ	§ 302 TPQ	CAA 112(2) TQ
Methanol	67-56-1	Methanol	No	5000 lb final RQ; 2270 kg final RQ	No	No

**California Prop 65:** WARNING: This product contains a chemical known to the state of California to cause cancer, birth defects or other reproductive harm.

## Section 16

## Additional Information

**Revised: 09/03/2014**

**Replaces: 09/03/2014**

**Printed: 09-11-2014**

The information provided in this (Material) Safety Data Sheet represents a compilation of data drawn directly from various sources available to us. Carolina Biological Supply makes no representation or guarantee as to the suitability of this information to a particular application of the substance covered in the (Material) Safety Data Sheet.

### Glossary

ACGIH	American Conference of Governmental Industrial Hygienists	NTP	National Toxicology Program
CAS	Chemical Abstract Service Number	OSHA	Occupational Safety and Health Administration
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act	PEL	Permissible Exposure Limit
DOT	U.S. Department of Transportation	ppm	Parts per million
IARC	International Agency for Research on Cancer	RCRA	Resource Conservation and Recovery Act
N/A	Not Available	SARA	Superfund Amendments and Reauthorization Act
		TLV	Threshold Limit Value
		TSCA	Toxic Substances Control Act
		IDLH	Immediately dangerous to life and health

## Section 1 Chemical Product and Company Information

Page E1 of E2



5100 West Henrietta Rd  
PO Box 92912  
Rochester, NY 14692-9012  
Tel: (800) 962-2660

**CHEMTREC 24 Hour Emergency**  
**Phone Number (800) 424-9300**  
For laboratory use only.  
Not for drug, food or household use.

Product	CHROMIUM(III) NITRATE
Synonyms	Chromic Nitrate

## Section 2 Hazards Identification

Signal word: DANGER

Pictograms: GHS03 / GHS05 / GHS07

Target organs: Respiratory tract, Liver, Kidneys



## GHS Classification:

Oxidizing solid (Category 3)

Skin irritation (Category 2)

Eye irritation (Category 2A)

## GHS Label information: Hazard statement:

H272: May intensify fire; oxidizer.

H315: Causes skin irritation.

H319: Causes serious eye irritation.

## Precautionary statement:

P210: Keep away from heat/sparks/open flames/hot surfaces. No smoking.

P220: Keep away from clothing/incompatible/combustible materials.

P221: Take any precaution to avoid mixing with combustibles.

P264: Wash hands thoroughly after handling.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

P370+P378: In case of fire: Use flooding amounts of water to extinguish.

P302+P352: IF ON SKIN: Wash with plenty of water and soap.

P332+P313: If skin irritation occurs: Get medical attention.

P362+P364: Take off contaminated clothing and wash it before reuse.

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

P310: Immediately call a POISON CENTER or doctor.

P501: Dispose of contents/container to a licensed chemical disposal agency in accordance with local/regional/national regulations.

Ca Prop 65: This product contains a chemical known to the State of California to cause cancer or reproductive toxicity.

## Section 3 Composition, Information on Ingredients

Chemical Name	CAS #	%	EINECS
Chromium nitrate	7789-02-8	100%	236-921-1 [anhydrous]

## Section 4 First Aid Measures

**INGESTION:** HARMFUL IF SWALLOWED. Call physician or Poison Control Center immediately. Induce vomiting only if advised by appropriate medical personnel. Never give anything by mouth to an unconscious person.

**INHALATION:** HARMFUL IF INHALED. CAUSES RESPIRATORY TRACT IRRITATION. Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

**EYE CONTACT:** CAUSES SERIOUS EYE IRRITATION. Check for and remove contact lenses. Flush thoroughly with water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get immediate medical attention.

**SKIN ABSORPTION:** CAUSES SKIN IRRITATION. Remove contaminated clothing. Flush thoroughly with mild soap and water. If irritation occurs, get medical attention.

## Section 5 Fire Fighting Measures

**Suitable Extinguishing Media:** Use flooding amounts of water to extinguish. Do not use dry chemicals or foams. CO<sub>2</sub> or Halon® may provide limited control.

**Protective Actions for Fire-fighters:** In fire conditions, wear a NIOSH/MSHA-approved self-contained breathing apparatus and full protective gear. Use water spray to keep fire-exposed containers cool.

**Specific Hazards:** During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

## Section 6 Accidental Release Measures

**Personal Precautions:** Evacuate personnel to safe area. Use proper personal protective equipment as indicated in Section 8. Provide adequate ventilation.

**Environmental Precautions:** Avoid runoff into storm sewers and ditches which lead to waterways.

**Containment and Cleanup:** Recover for reuse if not contaminated. Remove all sources of ignition. Sweep or vacuum up and place in a suitable container for proper disposal. Wash spill area with soap and water.

**Precautions for Safe Handling:** Read label on container before using. Do not wear contact lenses when working with chemicals. Keep out of reach of children. Avoid contact with eyes, skin and clothing. Do not inhale dusts. Use with adequate ventilation. Avoid ingestion. Wash thoroughly after handling. Remove and wash clothing before reuse.

**Conditions for Safe Storage:** Store in a cool, dry, well-ventilated area away from incompatible substances.

## Section 8 Exposure Controls / Personal Protection

Exposure Limits:	Chemical Name	ACGIH (TLV)	OSHA (PEL)	NIOSH (REL)
	Chromium(III) inorganic compounds, as Cr	TWA: 0.5 mg/m <sup>3</sup> (A4)	TWA: 0.5 mg/m <sup>3</sup>	TWA: 0.5 mg/m <sup>3</sup>

**Engineering controls:** Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower and fire extinguishing material. Personnel should wear safety glasses, goggles, or faceshield, lab coat or apron, appropriate protective gloves. Use adequate ventilation to keep airborne concentrations low.

**Respiratory protection:** None should be needed in normal laboratory handling at room temperatures. If dusty conditions prevail, work in fume hood or wear a NIOSH/MSHA-approved respirator.

## Section 9 Physical &amp; Chemical Properties

<b>Appearance:</b> Solid. Deep violet crystals	<b>Evaporation rate ( = 1):</b> Data not available	<b>Partition coefficient:</b> Data not available
<b>Odor:</b> No odor	<b>Flammability (solid/gas):</b> Data not available	<b>Auto-ignition temperature:</b> Data not available
<b>Odor threshold:</b> Data not available	<b>Explosion limits: Lower / Upper:</b> Data not available	<b>Decomposition temperature:</b> 100°C (212°F)
<b>pH:</b> Data not available	<b>Vapor pressure (mm Hg):</b> Negligible	<b>Viscosity:</b> Data not available
<b>Melting / Freezing point:</b> 60°C (140°F)	<b>Vapor density (Air = 1):</b> Data not available	<b>Molecular formula:</b> Cr(NO <sub>3</sub> ) <sub>3</sub> ·9H <sub>2</sub> O
<b>Boiling point:</b> Data not available	<b>Relative density (Specific gravity):</b> 1.85	<b>Molecular weight:</b> 400.15
<b>Flash point:</b> Data not available	<b>Solubility(ies):</b> Soluble in water	

## Section 10 Stability &amp; Reactivity

**Chemical stability:** Stable

**Hazardous polymerization:** Will not occur.

**Conditions to avoid:** Excessive temperatures.

**Incompatible materials:** Aluminium and magnesium metals. Easily oxidizable materials such as esters and ethers. May ignite organic materials on contact.

**Hazardous decomposition products:** Nitrogen oxides, chromium dust and/or fume.

## Section 11 Toxicological Information

**Acute toxicity:** Oral-rat LD50: 3250 mg/kg

**Skin corrosion/irritation:** Data not available

**Serious eye damage/irritation:** Data not available

**Respiratory or skin sensitization:** Data not available

**Germ cell mutagenicity:** Data not available

**Carcinogenicity:** Data not available

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

IARC classified: Group 3: Not classifiable as to its carcinogenicity to humans. [Chromium compounds]

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Ca Prop 65: This product contains a chemical known to the State of California to cause cancer or reproductive toxicity. [Chromium compounds]

**Reproductive toxicity:** Data not available

**STOT-single exposure:** Data not available

**STOT-repeated exposure:** Data not available

**Aspiration hazard:** Data not available

**Potential health effects:**

Inhalation: Inhalation may cause cough and sore throat.

Ingestion: Ingestion causes abdominal pain, diarrhea, nausea, and vomiting.

Skin: Contact with skin causes irritation.

Eyes: Contact with eyes causes serious eye irritation.

**Signs and symptoms of exposure:** Exercise appropriate procedures to minimize potential hazards.

**Additional information:** RTECS #: GB6300000

## Section 12 Ecological Information

**Toxicity to fish:** No data available

**Toxicity to daphnia and other aquatic invertebrates:** No data available

**Toxicity to algae:** No data available

**Persistence and degradability:** No data available

**Bioaccumulative potential:** No data available

**Mobility in soil:** No data available

**PBT and vPvB assessment:** No data available

**Other adverse effects:** An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

## Section 13 Disposal Considerations

These disposal guidelines are intended for the disposal of catalog-size quantities only. Federal regulations may apply to empty container. State and/or local regulations may be different. Dispose of in accordance with all local, state and federal regulations or contract with a licensed chemical disposal agency.

## Section 14 Transport Information (US DOT / CANADA TDG)

**UN/NA number:** UN2720

**Shipping name:** Chromium nitrate

**Hazard class:** 5.1

**Packing group:** III

**Reportable Quantity:** No


**Marine pollutant:** No

**Exceptions:** Limited quantity equal to or less than 5 Kg

**2012 ERG Guide #** 141

## Section 15 Regulatory Information

A chemical is considered to be listed if the CAS number for the anhydrous form is on the Inventory list.

Component	TSCA	CERLCA (RQ)	RCRA code	DSL	NDSL	WHMIS Classification
Chromium nitrate (CAS # 13548-38-4)	Listed	Not listed	Not listed	Listed	Not listed	 C

## Section 16 Additional Information

The information contained herein is furnished without warranty of any kind. Employers should use this information only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees. NTP: National Toxicology Program, IARC: International Agency for Research on Cancer, OSHA: Occupational Safety and Health Administration, STOT: Specific Target Organ Toxicity, SE: Single Exposure, RE: Repeated Exposure, ERG: Emergency Response Guidebook.

# FLINN SCIENTIFIC, INC.

## Safety Data Sheet (SDS)

SDS #: 241.00

Revision Date: March 25, 2014

### SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

#### Chromium Potassium Sulfate

Flinn Scientific, Inc. P.O. Box 219, Batavia, IL 60510 (800) 452-1261

CHEMTREC Emergency Phone Number: (800) 424-9300

Signal Word **WARNING**

Pictograms



### SECTION 2 — HAZARDS IDENTIFICATION

Hazard class: Acute toxicity, oral and inhalation (Category 5). May be harmful if swallowed or inhaled (H303+H333).

Hazard class: Skin and serious eye damage, corrosion or irritation (Category 2, 2B). Causes skin and eye irritation (H315+H320).

### SECTION 3 — COMPOSITION, INFORMATION ON INGREDIENTS

Component Name	CAS Number	Formula	Formula Weight	Concentration
Chromium potassium sulfate, dodecahydrate	7788-99-0	CrK(SO <sub>4</sub> ) <sub>2</sub> ·12H <sub>2</sub> O	499.43	
Synonyms: Chromium(III) potassium sulfate; Chrome alum; Chromic potassium sulfate				

### SECTION 4 — FIRST AID MEASURES

**If exposed or concerned:** Get medical advice or attention (P308+P313)

**If inhaled:** Remove victim to fresh air in a position comfortable for breathing (P304+P340).

**If in eyes:** Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do so. Continue rinsing (P305+P351+P338). **If eye irritation persists:** Get medical advice or attention (P337+P313).

**If on skin:** Rinse cautiously with water for several minutes (P351).

**If swallowed:** Rinse mouth. Call a POISON CENTER or physician if you feel unwell.

### SECTION 5 — FIRE FIGHTING MEASURES

Nonflammable solid.

When heated to decomposition, may emit toxic fumes.

**In case of fire:** Use a tri-class dry chemical fire extinguisher.

**NFPA Code**  
None  
established

### SECTION 6 — ACCIDENTAL RELEASE MEASURES

Sweep up the spill, place in a sealed bag or container, and dispose. Ventilate area and wash spill site after material pickup is complete. See Sections 8 and 13 for further information.

---

**SECTION 7 — HANDLING AND STORAGE**

---

Flinn Suggested Chemical Storage Pattern: Inorganic #2. Store with acetates, halides, sulfates, sulfites, thiosulfates and phosphates. Store in a cool, dry place. Store in a Flinn Chem-Saf™ bag.

---

**SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION**

---

Wear protective gloves, protective clothing, and eye protection (P280). Wash hands thoroughly after handling (P264). Exposure guidelines: PEL 0.5 mg/m<sup>3</sup> (OSHA); TLV 0.5 mg/m<sup>3</sup> (ACGIH)

---

**SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES**

---

Red-violet crystals. Odorless.  
Soluble: Water

Melting point: 89 °C  
Specific gravity: 1.8

---

**SECTION 10 — STABILITY AND REACTIVITY**

---

Avoid heat.  
Shelf life: Fair to poor, efflorescent. See Section 7 for further information.

---

**SECTION 11 — TOXICOLOGICAL INFORMATION**

---

Acute effects: Irritant.  
Chronic effects: N.A.  
Target organs: Skin.

ORL-RAT LD<sub>50</sub>: 3530 mg/kg  
IHL-RAT LC<sub>50</sub>: N.A.  
SKN-RBT LD<sub>50</sub>: N.A.

N.A. = Not available, not all health aspects of this substance have been fully investigated.

---

**SECTION 12 — ECOLOGICAL INFORMATION**

---

Data not yet available.

---

**SECTION 13 — DISPOSAL CONSIDERATIONS**

---

Please review all federal, state and local regulations that may apply before proceeding.  
Flinn Suggested Disposal Method #27f is one option.

---

**SECTION 14 — TRANSPORT INFORMATION**

---

Shipping name: Not regulated. Hazard class: N/A. UN number: N/A.

N/A = Not applicable

---

**SECTION 15 — REGULATORY INFORMATION**

---

TSCA-listed, EINECS-listed (233-401-6).

---

**SECTION 16 — OTHER INFORMATION**

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This Safety Data Sheet (SDS) is for guidance and is based upon information and tests believed to be reliable. Flinn Scientific, Inc. makes no guarantee of the accuracy or completeness of the data and shall not be liable for any damages relating thereto. The data is offered solely for your consideration, investigation, and verification. The data should not be confused with local, state, federal or insurance mandates, regulations, or requirements and CONSTITUTE NO WARRANTY. Any use of this data and information must be determined by the science instructor to be in accordance with applicable local, state or federal laws and regulations. The conditions or methods of handling, storage, use and disposal of the product(s) described are beyond the control of Flinn Scientific, Inc. and may be beyond our knowledge. FOR THIS AND OTHER REASONS, WE DO NOT ASSUME RESPONSIBILITY AND EXPRESSLY DISCLAIM LIABILITY FOR LOSS, DAMAGE OR EXPENSE ARISING OUT OF OR IN ANY WAY CONNECTED WITH THE HANDLING, STORAGE, USE OR DISPOSAL OF THIS PRODUCT(S).

Consult your copy of the *Flinn Science Catalog/Reference Manual* for additional information about laboratory chemicals.

Revision Date: March 25, 2014

# FLINN SCIENTIFIC, INC.

## Safety Data Sheet (SDS)

SDS #: 244.00

Revision Date: March 21, 2014

### SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

#### Citric Acid

Flinn Scientific, Inc. P.O. Box 219, Batavia, IL 60510 (800) 452-1261

CHEMTREC Emergency Phone Number: (800) 424-9300

Signal Word **WARNING**

Pictograms



### SECTION 2 — HAZARDS IDENTIFICATION

Hazard class: Skin and serious eye damage, corrosion or irritation (Category 2, 2B). Causes skin and eye irritation (H315+H320).

### SECTION 3 — COMPOSITION, INFORMATION ON INGREDIENTS

Component Name	CAS Number	Formula	Formula Weight	Concentration
Citric acid anhydrous	77-92-9	C <sub>6</sub> H <sub>8</sub> O <sub>7</sub>	192.14	
Synonym: 2-Hydroxy-1,2,3-propanetricarboxylic acid				

### SECTION 4 — FIRST AID MEASURES

Get medical advice or attention if skin or eye irritation persist (P313+P337+P332).

**If inhaled:** Remove victim to fresh air and keep at rest in a position comfortable for breathing.

**If in eyes:** Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do so. Continue rinsing. (P305+P351+P338). **If on skin:** Wash with plenty of water (P302+P352). Take off contaminated clothing and wash before reuse (P362).

**If swallowed:** Rinse mouth. Call a POISON CENTER or physician if you feel unwell.

### SECTION 5 — FIRE FIGHTING MEASURES

Combustible solid.

Flash point: 155 °C Autoignition Temperature: 345 °C

When heated to decomposition, may emit toxic fumes.

**In case of fire:** Use a tri-class dry chemical fire extinguisher.

**NFPA CODE**  
None  
established

### SECTION 6 — ACCIDENTAL RELEASE MEASURES

Wipe up the spill, place in a sealed bag or container, and dispose. Wash spill site after material pickup is complete. See Sections 8 and 13 for further information.

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**SECTION 7 — HANDLING AND STORAGE**

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Flinn Suggested Chemical Storage Pattern: Organic #1. Store with acids, anhydrides and peracids.  
Store in a cool, dry place. Store in a Flinn Chem-Saf™ bag.

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**SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION**

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Wear protective gloves, protective clothing, and eye protection (P280). Wash hands thoroughly after handling (P264).

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**SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES**

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White granules. Odorless.  
Soluble: Water, alcohol, and ether

Boiling point: 310 °C  
Melting point: 153 °C  
Specific gravity: 1.665

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**SECTION 10 — STABILITY AND REACTIVITY**

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Avoid contact with oxidizers, bases, and reducing agents.  
Shelf life: Poor, efflorescent. See Section 7 for further information.

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**SECTION 11 — TOXICOLOGICAL INFORMATION**

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Acute effects: Eye and skin irritant.  
Chronic effects: N.A.  
Target organs: Eyes, skin.

ORL-RAT LD<sub>50</sub>: 3g/kg  
IHL-RAT LC<sub>50</sub>: N.A.  
SKN-RBT LD<sub>50</sub>: N.A.

N.A. = Not available, not all health aspects of this substance have been fully investigated.

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**SECTION 12 — ECOLOGICAL INFORMATION**

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Data not yet available.

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**SECTION 13 — DISPOSAL CONSIDERATIONS**

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Please review all federal, state and local regulations that may apply before proceeding.  
Flinn Suggested Disposal Method #26a is one option.

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**SECTION 14 — TRANSPORT INFORMATION**

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Shipping name: Not regulated. Hazard class: N/A. UN number: N/A.

N/A = Not applicable

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**SECTION 15 — REGULATORY INFORMATION**

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TSCA-listed, EINECS-listed (201-069-1).

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**SECTION 16 — OTHER INFORMATION**

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This Safety Data Sheet (SDS) is for guidance and is based upon information and tests believed to be reliable. Flinn Scientific, Inc. makes no guarantee of the accuracy or completeness of the data and shall not be liable for any damages relating thereto. The data is offered solely for your consideration, investigation, and verification. The data should not be confused with local, state, federal or insurance mandates, regulations, or requirements and CONSTITUTE NO WARRANTY. Any use of this data and information must be determined by the science instructor to be in accordance with applicable local, state or federal laws and regulations. The conditions or methods of handling, storage, use and disposal of the product(s) described are beyond the control of Flinn Scientific, Inc. and may be beyond our knowledge. FOR THIS AND OTHER REASONS, WE DO NOT ASSUME RESPONSIBILITY AND EXPRESSLY DISCLAIM LIABILITY FOR LOSS, DAMAGE OR EXPENSE ARISING OUT OF OR IN ANY WAY CONNECTED WITH THE HANDLING, STORAGE, USE OR DISPOSAL OF THIS PRODUCT(S).

Consult your copy of the *Flinn Science Catalog/Reference Manual* for additional information about laboratory chemicals.

Revision Date: March 21, 2014

# Safety Data Sheet

## Citric Acid, Anhydrous

**CAROLINA**<sup>®</sup>  
www.carolina.com

### Section 1 Product Description

**Product Name:** Citric Acid, Anhydrous  
**Recommended Use:** Science education applications  
**Synonyms:** 2-Hydroxy-1,2,3-propanetricarboxylic Acid  
**Distributor:** Carolina Biological Supply Company, 2700 York Road, Burlington, NC 27215-3398  
**Chemical Information:** 800-227-1150 (8am-5pm (ET) M-F)  
**Chemtrec:** 800-424-9300 (Transportation Spill Response 24 hours)

### Section 2 Hazard Identification

Classification of the chemical in accordance with paragraph (d) of §1910.1200;

**WARNING**



Causes serious eye irritation.

**GHS Classification:**

Serious Eye Damage/Eye Irritation Category 2A, Skin Corrosion/Irritation Category 3

### Section 3 Composition / Information on Ingredients

<u>Chemical Name</u>	<u>CAS #</u>	<u>%</u>
Citric Acid, Anhydrous	77-92-9	100

### Section 4 First Aid Measures

**Emergency and First Aid Procedures**

**Inhalation:** In case of accident by inhalation: remove casualty to fresh air and keep at rest.  
**Eyes:** IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.  
**Skin Contact:** After contact with skin, wash immediately with plenty of water.  
**Ingestion:** If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

### Section 5 Firefighting Procedures

**Extinguishing Media:** Use dry chemical, CO2 or appropriate foam.  
**Fire Fighting Methods and Protection:** Firefighters should wear full protective equipment and NIOSH approved self-contained breathing apparatus.  
**Fire and/or Explosion Hazards:** Fire or excessive heat may produce hazardous decomposition products.  
**Hazardous Combustion Products:** Carbon dioxide, Carbon monoxide

### Section 6 Spill or Leak Procedures

**Steps to Take in Case Material Is Released or Spilled:** No health effects expected from the clean-up of this material if contact can be avoided. Follow personal protective equipment recommendations found in Section 8 of this MSDS. Avoid the generation of dusts during clean-up. Prevent the spread of any spill to minimize harm to human health and the environment if safe to do so. Wear complete and proper personal protective equipment following the recommendation of Section 8 at a minimum. Dike with suitable absorbent material like granulated clay. Gather and store in a sealed container pending a waste disposal evaluation.



# Safety Data Sheet

## Section 7 Handling and Storage

**Handling:** Wash thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection.  
**Storage:** Keep container tightly closed in a cool, well-ventilated place.  
**Storage Code:** Green - general chemical storage

## Section 8 Protection Information

<u>Chemical Name</u>	<u>ACGIH</u>	<u>OSHA PEL</u>
Citric Acid	(TWA) N/A	(TWA) N/A
	(STEL) N/A	(STEL) N/A

### Control Parameters

**Engineering Measures:** No exposure limits exist for the constituents of this product. General room ventilation might be required to maintain operator comfort under normal conditions of use.

**Personal Protective Equipment (PPE):** Lab coat, apron, eye wash, safety shower.

**Respiratory Protection:** No respiratory protection required under normal conditions of use.

**Respirator Type(s):** NIOSH approved air purifying respirator with dust/mist filter.

**Eye Protection:** Wear chemical splash goggles when handling this product. Have an eye wash station available.

**Skin Protection:** Avoid skin contact by wearing chemically resistant gloves, an apron and other protective equipment depending upon conditions of use. Inspect gloves for chemical break-through and replace at regular intervals. Clean protective equipment regularly. Wash hands and other exposed areas with mild soap and water before eating, drinking, and when leaving work.

**Gloves:** Butyl rubber, Natural latex,, Neoprene, Nitrile, Polyvinyl chloride

## Section 9 Physical Data

<b>Formula:</b> C6H8O7	<b>Vapor Pressure:</b> 1.7x10-8 mm Hg @ 25 C (est)
<b>Molecular Weight:</b> 192.13	<b>Evaporation Rate (BuAc=1):</b> No data available
<b>Appearance:</b> Colorless to White Crystalline Solid	<b>Vapor Density (Air=1):</b> No data available
<b>Odor:</b> None	<b>Specific Gravity:</b> 1.665
<b>Odor Threshold:</b> No data available	<b>Solubility in Water:</b> Soluble
<b>pH:</b> 2.1, conc: 0.1 M (solution)	<b>Log Pow (calculated):</b> -1.72
<b>Melting Point:</b> 153 C	<b>Autoignition Temperature:</b> 1010 - 1011 C
<b>Boiling Point:</b> No data available	<b>Decomposition Temperature:</b> 175 C
<b>Flash Point:</b> No data available	<b>Viscosity:</b> No data available
<b>Flammable Limits in Air:</b> No data available	<b>Percent Volatile by Volume:</b> No data available

## Section 10 Reactivity Data

**Reactivity:** Not generally reactive under normal conditions.

**Chemical Stability:** Stable under normal conditions.

**Conditions to Avoid:** Exposure to moisture

**Incompatible Materials:** Strong oxidizing agents, Strong reducing agents, Metals, Metal Nitrates, Caustics (bases)

**Hazardous Decomposition Products:** Carbon oxides

**Hazardous Polymerization:** Will not occur

## Section 11 Toxicity Data

**Routes of Entry:** Inhalation and ingestion.

**Symptoms (Acute):** No data available, Hypotension, Hyperkalemia, Metabolic Acidosis

**Delayed Effects:** No data available

### Acute Toxicity:

<u>Chemical Name</u>	<u>CAS Number</u>	<u>Oral LD50</u>	<u>Dermal LD50</u>	<u>Inhalation LC50</u>
Citric Acid, Anhydrous	77-92-9	ORAL LD50 Rat 3000 mg/kg	Not applicable	Not applicable

# Safety Data Sheet

**Carcinogenicity:**  
**Chemical Name** Citric Acid, Anhydrous  
**CAS Number** 77-92-9  
**IARC** Not listed  
**NTP** Not listed  
**OSHA** Not listed

**Chronic Effects:**  
**Mutagenicity:** No evidence of a mutagenic effect.  
**Teratogenicity:** No evidence of a teratogenic effect (birth defect).  
**Sensitization:** No evidence of a sensitization effect.  
**Reproductive:** No evidence of negative reproductive effects.  
**Target Organ Effects:**  
**Acute:** See Section 2  
**Chronic:** Not listed as a carcinogen by IARC, NTP or OSHA.

## Section 12 Ecological Data

**Overview:** This material is not expected to be harmful to the ecology.  
**Mobility:** This material is expected to have very high mobility in soil. It does not absorb to most soil types.  
**Persistence:** Dissolved into water, Biodegradation  
**Bioaccumulation:** Bioconcentration is not expected to occur.  
**Degradability:** Biodegrades quickly.  
**Other Adverse Effects:** No data

**Chemical Name** Citric Acid, Anhydrous  
**CAS Number** 77-92-9  
**Eco Toxicity** 96 HR LC50 LEPOMIS MACROCHIRUS 1516 MG/L [STATIC]  
72 HR EC50 DAPHNIA MAGNA 120 MG/L

## Section 13 Disposal Information

**Disposal Methods:** Dispose in accordance with all applicable Federal, State and Local regulations. Always contact a permitted waste disposer (TSD) to assure compliance.  
**Waste Disposal Code(s):** Not Determined

## Section 14 Transport Information

**Ground - DOT Proper Shipping Name:** Not regulated for transport by US DOT.  
**Air - IATA Proper Shipping Name:** Not regulated for air transport by IATA.

## Section 15 Regulatory Information

**TSCA Status:** All components in this product are on the TSCA Inventory.

Chemical Name	CAS Number	§ 313 Name	§ 304 RQ	CERCLA RQ	§ 302 TPQ	CAA 112(2) TQ
Citric Acid, Anhydrous	77-92-9	No	No	No	No	No

## Section 16 Additional Information

**Revised:** 06/20/2013  
**Replaces:** 01/24/2013  
**Printed:** 06-21-2013

The information provided in this (Material) Safety Data Sheet represents a compilation of data drawn directly from various sources available to us. Carolina Biological Supply makes no representation or guarantee as to the suitability of this information to a particular application of the substance covered in the (Material) Safety Data Sheet.

### Glossary

ACGIH	American Conference of Governmental Industrial Hygienists	NTP	National Toxicology Program
CAS	Chemical Abstract Service Number	OSHA	Occupational Safety and Health Administration
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act	PEL	Permissible Exposure Limit
DOT	U.S. Department of Transportation	ppm	Parts per million
IARC	International Agency for Research on Cancer	RCRA	Resource Conservation and Recovery Act
N/A	Not Available	SARA	Superfund Amendments and Reauthorization Act
		TLV	Threshold Limit Value
		TSCA	Toxic Substances Control Act
		IDLH	Immediately dangerous to life and health

# Safety Data Sheet

**Section 1 Chemical Product and Company Information**


5100 West Henrietta Rd  
PO Box 92912  
Rochester, NY 14692-9012  
Tel: (800) 962-2660

**CHEMTREC 24 Hour Emergency**  
**Phone Number (800) 424-9300**  
For laboratory use only.  
Not for drug, food or household use.

<b>Product</b>	CITRIC ACID, MONOHYDRATE
<b>Synonyms</b>	2-Hydroxy-1,2,3-Propane Tricarboxylic Acid

**Section 2 Hazards Identification**

This substance or mixture has not been classified as hazardous according to the Globally Harmonized System (GHS) of Classification and Labeling of Chemicals.

**Signal word:** WARNING  
**Pictograms:** GHS07  
**Target organs:** None known



**GHS Classification:**  
Eye irritation (Category 2)

**GHS Label information: Hazard statement(s):**  
H319: Causes serious eye irritation.

**Precautionary statement(s):**

P264: Wash hands thoroughly after handling.  
P280: Wear protective gloves/protective clothing/eye protection/face protection.  
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P337+P313: If eye irritation persists: Get medical attention.

Ca Prop 65: This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm.

**Section 3 Composition / Information on Ingredients**

Chemical Name	CAS #	%	EINECS
Citric acid, monohydrate	5949-29-1	100%	201-069-1 (anhydrous)

**Section 4 First Aid Measures**

**INGESTION:** Call physician or Poison Control Center immediately. Induce vomiting only if advised by appropriate medical personnel. Never give anything by mouth to an unconscious person.

**INHALATION:** Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

**EYE CONTACT:** CAUSES IRRITATION. Check for and remove contact lenses. Flush thoroughly with water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get immediate medical attention.

**SKIN ABSORPTION:** Remove contaminated clothing. Flush thoroughly with mild soap and water. If irritation occurs, get medical attention.

**Section 5 Fire Fighting Measures**

**Suitable Extinguishing Media:** Use any media suitable for extinguishing supporting fire

**Protective Actions for Fire-fighters:** In fire conditions, wear a NIOSH/MSHA-approved self-contained breathing apparatus and full protective gear. Use water spray to keep fire-exposed containers cool.

**Specific Hazards:** During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

**Section 6 Accidental Release Measures**

**Personal Precautions:** Evacuate personnel to safe area. Use proper personal protective equipment as indicated in Section 8. Provide adequate ventilation.

**Environmental Precautions:** Avoid runoff into storm sewers and ditches which lead to waterways.

**Containment and Cleanup:** Recover for use if not contaminated. Sweep or vacuum up and place in a suitable container for proper disposal. Wash spill area with soap and water.

**Section 7 Handling & Storage**

**Precautions for Safe Handling:** Read label on container before using. Do not wear contact lenses when working with chemicals. Keep out of reach of children. Avoid contact with eyes, skin and clothing. Do not inhale dusts. Use with adequate ventilation. Avoid ingestion. Wash thoroughly after handling. Remove and wash clothing before reuse.

**Conditions for Safe Storage:** Store in a cool, dry, well-ventilated area away from incompatible substances. Minimize dust generation.

**Section 8 Exposure Controls / Personal Protection**

Exposure Limits:	Chemical Name	ACGIH (TLV)	OSHA (PEL)	NIOSH (REL)
	Citric acid	Not listed	Not listed	Not listed

**Engineering controls:** Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower and fire extinguishing material. Personnel should wear safety glasses, goggles, or faceshield, lab coat or apron, appropriate protective gloves. Use adequate ventilation to keep airborne concentrations low.

**Respiratory protection:** None should be needed in normal laboratory handling at room temperatures. If dusty conditions prevail, work in fume hood or wear a NIOSH/MSHA-approved respirator.

**Section 9 Physical & Chemical Properties**

**Appearance:** Solid. White, deliquescent crystals  
**Odor:** No odor.  
**Odor threshold:** Data not available  
**pH:** Unknown  
**Melting / Freezing point:** Loses H<sub>2</sub>O @ 100°C (212°F)  
**Boiling point:** Decomposes  
**Flash point:** Non-flammable

**Evaporation rate ( = 1):** Not applicable  
**Flammability (solid/gas):** Not applicable  
**Explosion limits: Lower / Upper:** Not applicable  
**Vapor pressure (mm Hg):** Data not available  
**Vapor density (Air = 1):** Data not available  
**Relative density (Specific gravity):** 1.542  
**Solubility(ies):** Soluble in water

**Partition coefficient:** Data not available  
**Auto-ignition temperature:** Data not available  
**Decomposition temperature:** Data not available  
**Viscosity:** Not applicable  
**Molecular formula:** C<sub>6</sub>H<sub>8</sub>O<sub>7</sub>·H<sub>2</sub>O  
**Molecular weight:** 210.14

**Section 10 Stability & Reactivity**

**Chemical stability:** Stable  
**Hazardous polymerization:** Will not occur.  
**Conditions to avoid:** Excessive temperature and heat. Avoid dust formation.  
**Incompatible materials:** Strong bases and oxidizing materials.  
**Hazardous decomposition products:** Carbon oxides.

**Section 11 Toxicological Information**

**Acute toxicity:** Oral-rat LD50: 12,000 mg/kg (anhydrous)  
**Skin corrosion/irritation:** Data not available  
**Serious eye damage/irritation:** Rabbit-highly irritating  
**Respiratory or skin sensitization:** Data not available  
**Germ cell mutagenicity:** Data not available  
**Carcinogenicity:** Data not available  
 NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.  
 IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.  
 OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.  
**Reproductive toxicity:** Data not available  
**STOT-single exposure:** Data not available  
**STOT-repeated exposure:** Data not available  
**Aspiration hazard:** Data not available  
**Potential health effects:**  
 Inhalation: Inhalation may cause irritation to mucous membranes causing sore throat, coughing and shortness of breath.  
 Ingestion: Ingestion may cause acute gastrointestinal irritation with abdominal pain.  
 Skin: Contact may cause irritation.  
 Eyes: Contact with eyes may cause irritation with redness, pain, possible eye burns, conjunctivitis, ulceration and permanent cloudiness.  
**Signs and symptoms of exposure:** Long term over-exposure may cause damage to tooth enamel.  
**Additional information:** RTECS #: GE7350000 (anhydrous)

**Section 12 Ecological Information**

**Toxicity to fish:** Lepomis macrochirus (Fish, Fresh water) LC50: 1,516 mg/l/96 hours (anhydrous)  
**Toxicity to daphnia and other aquatic invertebrates:** Daphnia magna (Crustacea) EC50: ca. 120 mg/l/72 hours (anhydrous)  
**Toxicity to algae:** Scenedesmus quadricauda (Algae) EC3: 640 mg/l/7 days (anhydrous)  
**Persistence and degradability:** No data available  
**Bioaccumulative potential:** No data available  
**Mobility in soil:** No data available  
**PBT and vPvB assessment:** No data available  
**Other adverse effects:** An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

**Section 13 Disposal Considerations**


These disposal guidelines are intended for the disposal of catalog-size quantities only. Federal regulations may apply to empty container. State and/or local regulations may be different. Dispose of in accordance with all local, state and federal regulations or contract with a licensed chemical disposal agency.

**Section 14 Transport Information**

**UN/NA number:** Not applicable  
**Hazard class:** Not applicable  
**Exceptions:** Not applicable  
**Shipping name:** Not Regulated  
**Packing group:** Not applicable  
**2012 ERG Guide #** Not applicable  
**Reportable Quantity:** No  
**Marine pollutant:** No

**Section 15 Regulatory Information**

A chemical is considered to be listed if the CAS number for the anhydrous form is on the inventory list.

Component	TSCA	CERCLA (RQ)	RCRA code	DSL	NDSL	WHMIS Classification
Citric acid, anhydrous	Listed	Not listed	Not listed	Listed	Not listed	 E

**Section 16 Additional Information**

The information contained herein is furnished without warranty of any kind. Employers should use this information only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees. NTP: National Toxicology Program, IARC: International Agency for Research on Cancer, OSHA: Occupational Safety and Health Administration, STOT: Specific Target Organ Toxicity, SE: Single Exposure, RE: Repeated Exposure, ERG: Emergency Response Guidebook.

## Clear Gear Spray

Version 0.0

SDS Number: 000000011631

Revision Date: 2016.04.19

**SECTION 1. IDENTIFICATION**

Product name : Clear Gear Spray

Product code : 000000011631

**Manufacturer or supplier's details**

Company : **Clear Gear**  
PO Box 149  
Rogersford, PA 19468  
USA  
Business Telephone 855-862-5490

E-mail address : info@cleargear.com :

Emergency telephone number 855-862-5490

**Recommended use of the chemical and restrictions on use**

Recommended use : Biocides

---

**SECTION 2. HAZARDS IDENTIFICATION****GHS Classification**

Not a hazardous substance or mixture according to US Regulation 29 CFR 1910.1200

**GHS label elements**

Not a hazardous substance or mixture according to US Regulation 29 CFR 1910.1200

Based on available data, the classification criteria are not met. Handle in accordance with good industrial hygiene and safety practice.

Precautionary statements : **Prevention:**  
P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.  
P262 Do not get in eyes, on skin, or on clothing.  
P270 Do not eat, drink or smoke when using this product.  
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.  
**Response:**  
P314 Get medical advice/ attention if you feel unwell.  
**Storage:**  
P402 + P404 Store in a dry place. Store in a closed container.  
P410 + P403 Protect from sunlight. Store in a well-ventilated place.  
**Disposal:**  
P501 Dispose of contents/container in accordance with local regulation.

## Clear Gear Spray

Version 0.0

SDS Number: 000000011631

Revision Date: 2016.04.19

**Other hazards**

None known.

**SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS****Hazardous components**

Chemical name	CAS-No.	Concentration (%)
Quaternary ammonium compounds, di-C8-10-alkyldimethyl, chlorides	68424-95-3	< 0.10
Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides	68424-85-1	< 0.10

**SECTION 4. FIRST AID MEASURES**

- If inhaled : Move to fresh air.  
If symptoms persist, call a physician.
- In case of skin contact : After contact with skin, wash immediately with plenty of soap and water.  
In the case of skin irritation or allergic reactions see a physician.
- In case of eye contact : In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- If swallowed : If accidentally swallowed obtain immediate medical attention.  
Clean mouth with water and drink afterwards plenty of water.  
Do not induce vomiting without medical advice.  
Never give anything by mouth to an unconscious person.

**SECTION 5. FIREFIGHTING MEASURES**

- Suitable extinguishing media : Dry powder  
Water spray  
Foam
- Specific hazards during firefighting : Heating or fire can release toxic gas.
- Further information : Use water spray to cool unopened containers.
- Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.

**SECTION 6. ACCIDENTAL RELEASE MEASURES**

- Personal precautions, protective equipment and emergency procedures : Use respirator when performing operations involving potential exposure to vapour of the product.

Environmental precautions

## Clear Gear Spray

Version 0.0

SDS Number: 000000011631

Revision Date: 2016.04.19

- General advice : Prevent product from entering drains.
- Methods and materials for containment and cleaning up : Sweep up or vacuum up spillage and collect in suitable container for disposal.

---

**SECTION 7. HANDLING AND STORAGE**

- Advice on safe handling : Provide sufficient air exchange and/or exhaust in work rooms.

---

**SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION****Components with workplace control parameters**

Contains no substances with occupational exposure limit values.

**Appropriate engineering controls****Personal protective equipment**

- Respiratory protection : In the case of vapour formation use a respirator with an approved filter.
- Hand protection
- Material : Nitrile rubber
- Rate of permeability : > 480 min
- Eye protection : Tightly fitting safety goggles
- Skin and body protection : Choose body protection according to the amount and concentration of the dangerous substance at the work place.  
No special protective equipment required.
- Hygiene measures : Avoid contact with skin, eyes and clothing.  
Wash hands before breaks and immediately after handling the product.

---

**SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

- Appearance : liquid
- Colour : no data available
- Odour : no data available
- Odour Threshold : no data available
- pH : 11
- Melting point/freezing point : no data available
- Boiling point/boiling range : no data available
- Flash point : > 93.34 °C



## Clear Gear Spray

Version 0.0

SDS Number: 000000011631

Revision Date: 2016.04.19

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Evaporation rate	:	no data available
Upper explosion limit	:	no data available
Lower explosion limit	:	no data available
Vapour pressure	:	no data available
Relative vapour density	:	no data available
Relative density	:	no data available
Density	:	no data available
Solubility(ies)		
Water solubility	:	soluble
Partition coefficient: n-octanol/water	:	no data available
Auto-ignition temperature	:	no data available
Decomposition temperature	:	no data available
Viscosity, dynamic	:	no data available
Viscosity, kinematic	:	no data available

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**SECTION 10. STABILITY AND REACTIVITY**

Possibility of hazardous reactions : None known.Stable under normal conditions.

---

**SECTION 11. TOXICOLOGICAL INFORMATION**

Information on likely routes of exposure : Inhalation  
Ingestion  
Eyes  
Skin

**Acute toxicity**

Acute dermal toxicity (LD50) : > 2,000 mg/kg  
Species: Rabbit

**Skin corrosion/irritation**

Skin irritation : non irritant  
Species: Rabbit

**Serious eye damage/eye irritation**

Eye irritation : minimal irritant  
Species: Rabbit

## Clear Gear Spray

Version 0.0

SDS Number: 000000011631

Revision Date: 2016.04.19

**SECTION 12. ECOLOGICAL INFORMATION****Ecotoxicity**

no data available

**Persistence and degradability**

no data available

**Bioaccumulative potential**

no data available

**Mobility in soil**

no data available

**Other adverse effects**

Additional ecological information : There is no data available for this product.

**SECTION 13. DISPOSAL CONSIDERATIONS****Disposal methods**

Waste from residues : Dispose of in accordance with local regulations.

Contaminated packaging : Dispose of as unused product.

**SECTION 14. TRANSPORT INFORMATION****IATA**

Not dangerous goods

**UN number** : Not applicable  
**Proper shipping name** : Not applicable  
**Transport hazard class** : Not applicable  
**Packing group** : Not applicable  
**Environmental hazards** : no

**IMDG**

Not dangerous goods

**UN number** : Not applicable  
**Proper shipping name** : Not applicable  
**Transport hazard class** : Not applicable  
**Packing group** : Not applicable  
**Environmental hazards** : Marine pollutant: no

**ADR**

Not dangerous goods

**UN number** : Not applicable  
**Proper shipping name** : Not applicable  
**Transport hazard class** : Not applicable  
**Packing group** : Not applicable  
**Environmental hazards** : no

## Clear Gear Spray

Version 0.0

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Revision Date: 2016.04.19

<b>RID</b>	:	Not dangerous goods
<b>UN number</b>	:	Not applicable
<b>Proper shipping name</b>	:	Not applicable
<b>Transport hazard class</b>	:	Not applicable
<b>Packing group</b>	:	Not applicable
<b>Environmental hazards</b>	:	no
<b>DOT</b>	:	Not dangerous goods
<b>UN number</b>	:	Not applicable
<b>Proper shipping name</b>	:	Not applicable
<b>Transport hazard class</b>	:	Not applicable
<b>Packing group</b>	:	Not applicable
<b>Environmental hazards</b>	:	no
<b>TDG</b>	:	Not dangerous goods
<b>UN number</b>	:	Not applicable
<b>Proper shipping name</b>	:	Not applicable
<b>Transport hazard class</b>	:	Not applicable
<b>Packing group</b>	:	Not applicable
<b>Environmental hazards</b>	:	no
<b>Special precautions for user</b>	:	none
<b>Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code</b>	:	Not applicable

**SECTION 15. REGULATORY INFORMATION**

**This chemical is a pesticide product registered by the United States Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets (SDS), and for workplace labels of non-pesticide chemicals.**

Signal word	:	CAUTION!
Hazard statements	:	Causes moderate eye irritation. Avoid contact with skin and clothing.
EPA No.	:	6836-152

**EPCRA - Emergency Planning and Community Right-to-Know Act**

**SARA 311/312 Hazards** : No SARA Hazards

**SARA 302**

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

## Clear Gear Spray

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**SARA 313**

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**US State Regulations****Massachusetts Right To Know**

No components are subject to the Massachusetts Right to Know Act.

**Pennsylvania Right To Know**

No components are subject to the Pennsylvania Right to know act

**New Jersey Right To Know**

No components are subject to the New Jersey Right to know act

**California Prop 65**

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

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**SECTION 16. OTHER INFORMATION**

Revision Date : 2016.04.19

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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**1. Identification**


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<b>Product identifier</b>	<b>Clorox Disinfectant Wipes - Fresh Scent</b>		
<b>Other means of identification</b>	EPA 5813-79		
	Document Number: US001094		
<b>Recommended use</b>	Disinfectant		
<b>Recommended restrictions</b>	None known.		
<b>Manufacturer/Importer/Supplier/Distributor information</b>			
<b>Manufacturer</b>			
<b>Company name</b>	The Clorox Company		
<b>Address</b>	1221 Broadway Oakland, CA 94612 United States		
<b>Telephone</b>	1-510-271-7000		
<b>E-mail</b>	Not available.		
<b>Emergency phone number</b>	Medical Emergency:	1-800-446-1014	
	Transportation Emergency:	1-800-424-9300 (Chemtrec)	

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**2. Hazards Identification**


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<b>Physical hazards</b>	Not classified.
<b>Health hazards</b>	Not classified.
<b>Environmental hazards</b>	Not classified.
<b>OSHA defined hazards</b>	Not classified.
<b>Label elements</b>	
<b>Hazard symbol</b>	None.
<b>Signal word</b>	None.
<b>Hazard statement</b>	The mixture does not meet the criteria for classification.
<b>Precautionary statement</b>	
<b>Prevention</b>	Observe good industrial hygiene practices.
<b>Response</b>	Wash hands after handling.
<b>Storage</b>	Store away from incompatible materials.
<b>Disposal</b>	Dispose of container in accordance with local, regional, national and international regulations.
<b>Hazard(s) not otherwise classified (HNOC)</b>	None known.
<b>Supplemental information</b>	This SDS is designed for workplace employees, emergency personnel and for other conditions and situations where there is greater potential for large-scale or prolonged exposure. This SDS is not applicable for consumer use of our products. For consumer use, all precautionary and first aid language is provided on the product label in accordance with the applicable government regulations.

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**3. Composition/Information on Ingredients**


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**Mixtures**

<b>Chemical name</b>	<b>Common name and synonyms</b>	<b>CAS number</b>	<b>%</b>
n-Alkyl (C12, 68%; C14, 32%) Dimethyl Ethylbenzyl Ammonium Chloride		85409-23-0	0.184
n-Alkyl (C14, 60%; C16, 30%; C12, 5%; C18, 5%) Dimethyl Benzyl Ammonium Chloride		53516-76-0	0.184

All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

**Composition comments** US GHS: The exact percentage (concentration) of composition has been withheld as a trade secret in accordance with paragraph (i) of §1910.1200.

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## 4. First Aid Measures

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<b>Inhalation</b>	If breathed in, move person into fresh air.
<b>Skin contact</b>	If on skin, rinse well with water.
<b>Eye contact</b>	IF IN EYES: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses if present, after the first 5 minutes, then, continue rinsing eye. Call a poison control center or doctor for treatment advice.
<b>Ingestion</b>	If swallowed, call a Poison Control Center or doctor immediately. DO NOT induce vomiting.
<b>Most important symptoms/effects, acute and delayed</b>	Direct contact with eyes may cause temporary irritation.
<b>Indication of immediate medical attention and special treatment needed</b>	Provide general supportive measures and treat symptomatically. Symptoms may be delayed. Have the product container or label with you when calling a poison control center, doctor, or going for treatment. For further information, call (800) 227-1860
<b>General information</b>	If you feel unwell, seek medical advice (show the label where possible). Show this safety data sheet to the doctor in attendance. Avoid contact with eyes and skin. KEEP OUT OF REACH OF CHILDREN AND PETS.

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## 5. Fire Fighting Measures

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<b>Suitable extinguishing media</b>	Treat for surrounding material.
<b>Unsuitable extinguishing media</b>	Do not use water jet as an extinguisher, as this will spread the fire.
<b>Specific hazards arising from the chemical</b>	During fire, gases hazardous to health may be formed.
<b>Special protective equipment and precautions for firefighters</b>	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
<b>Fire fighting equipment/instructions</b>	Move containers from fire area if you can do so without risk.
<b>Specific methods</b>	Use standard firefighting procedures and consider the hazards of other involved materials.
<b>General fire hazards</b>	No unusual fire or explosion hazards noted.

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## 6. Accidental Release Measures

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<b>Personal precautions, protective equipment and emergency procedures</b>	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
<b>Methods and materials for containment and cleaning up</b>	Prevent entry into waterways, sewer, basements or confined areas. Pick up and discard towelette. For waste disposal, see section 13 of the SDS.
<b>Environmental precautions</b>	Avoid release to the environment. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground. Do not discharge into lakes, streams, ponds or public waters.

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## 7. Handling and Storage

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<b>Precautions for safe handling</b>	Avoid contact with eyes and skin. Provide adequate ventilation. Wear appropriate personal protective equipment. Wash thoroughly after handling. Use good industrial hygiene practices in handling this material. When using do not eat or drink.
<b>Conditions for safe storage, including any incompatibilities</b>	Do not use or store near heat or open flame. Store away from incompatible materials (see Section 10 of the SDS). KEEP OUT OF REACH OF CHILDREN.

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## 8. Exposure Controls/Personal Protection

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<b>Biological limit values</b>	No biological exposure limits noted for the ingredient(s).
<b>Appropriate engineering controls</b>	Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.
<b>Individual protection measures, such as personal protective equipment</b>	
<b>Eye/face protection</b>	Not normally required under normal use conditions.
<b>Skin protection</b>	
<b>Hand protection</b>	Not normally required when used as directed. For prolonged use, wear rubber gloves.
<b>Other</b>	Wear appropriate chemical resistant clothing. As required by employer code.

<b>Respiratory protection</b>	Where exposure guideline levels may be exceeded, use an approved NIOSH respirator. Respirator should be selected by and used under the direction of a trained health and safety professional following requirements found in OSHA's respirator standard (29 CFR 1910.134), CAN/CSA-Z94.4 and ANSI's standard for respiratory protection (Z88.2).
<b>Thermal hazards</b>	Not applicable.
<b>General hygiene considerations</b>	Wash hands before breaks and immediately after handling the product. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. When using do not eat or drink.

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## 9. Physical and Chemical Properties

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<b>Appearance</b>	Clear
<b>Physical state</b>	Liquid.
<b>Form</b>	Liquid saturated on wipe.
<b>Color</b>	clear liquid on a wipe
<b>Odor</b>	Fruity, Apple, Floral
<b>Odor threshold</b>	Not available.
<b>pH</b>	6 - 9 (Liquid)
<b>Melting point/freezing point</b>	Not available.
<b>Initial boiling point and boiling range</b>	Not available.
<b>Pour point</b>	Not available.
<b>Specific gravity</b>	Not available.
<b>Partition coefficient (n-octanol/water)</b>	Not available.
<b>Flash point</b>	Not available.
<b>Evaporation rate</b>	Not available.
<b>Flammability (solid, gas)</b>	Not applicable.
<b>Upper/lower flammability or explosive limits</b>	
<b>Flammability limit - lower (%)</b>	Not available.
<b>Flammability limit - upper (%)</b>	Not available.
<b>Explosive limit - lower (%)</b>	Not available.
<b>Explosive limit - upper (%)</b>	Not available.
<b>Vapor pressure</b>	Not available.
<b>Vapor density</b>	Not available.
<b>Relative density</b>	1 (Liquid)
<b>Solubility(ies)</b>	Wipe is not soluble
<b>Auto-ignition temperature</b>	Not available.
<b>Decomposition temperature</b>	Not available.
<b>Viscosity</b>	Not available.

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## 10. Stability and Reactivity

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<b>Reactivity</b>	This product may react with strong oxidizing agents.
<b>Possibility of hazardous reactions</b>	No dangerous reaction known under conditions of normal use.
<b>Chemical stability</b>	Material is stable under normal conditions.
<b>Conditions to avoid</b>	Do not mix with other chemicals.
<b>Incompatible materials</b>	Oxidizers. Acids.
<b>Hazardous decomposition products</b>	May include and are not limited to: Oxides of carbon. Oxides of nitrogen. Ammonia. Chlorine gas.

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## 11. Toxicological Information

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### Information on likely routes of exposure

<b>Inhalation</b>	No adverse effects due to inhalation are expected. Excessive intentional inhalation may cause respiratory tract irritation.
<b>Skin contact</b>	Not expected to be a primary skin irritant.

<b>Eye contact</b>	Direct contact with eyes may cause temporary irritation.
<b>Ingestion</b>	May cause stomach distress, nausea or vomiting.

**Symptoms related to the physical, chemical and toxicological characteristics** Direct contact with eyes may cause temporary irritation.

**Information on toxicological effects**

**Acute toxicity** See below.

<b>Components</b>	<b>Species</b>	<b>Test Results</b>
n-Alkyl (C12, 68%; C14, 32%) Dimethyl Ethylbenzyl Ammonium Chloride (CAS 85409-23-0)		

**Acute**

*Dermal*

LD50	Rabbit	2300 mg/kg, ECHA
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*Inhalation*

LC50	Not available	
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*Oral*

LD50	Rat	344 mg/kg, ECHA
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**Skin corrosion/irritation** Not expected to be a primary skin irritant.

**Exposure minutes** Not available.

**Erythema value** Not available.

**Oedema value** Not available.

**Serious eye damage/eye irritation** Direct contact with eyes may cause temporary irritation.

**Corneal opacity value** Not available.

**Iris lesion value** Not available.

**Conjunctival reddening value** Not available.

**Conjunctival oedema value** Not available.

**Recover days** Not available.

**Respiratory or skin sensitization**

**Respiratory sensitization** Not available.

**Skin sensitization** Not available.

**Germ cell mutagenicity** Not available.

**Carcinogenicity**

**IARC Monographs. Overall Evaluation of Carcinogenicity**

Not listed.

**OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)**

Not regulated.

**US. National Toxicology Program (NTP) Report on Carcinogens**

Not listed.

**Reproductive toxicity** This product is not expected to cause reproductive or developmental effects.

**Specific target organ toxicity - single exposure** Not available.

**Specific target organ toxicity - repeated exposure** Not available.

**Aspiration hazard** Not an aspiration hazard.

**Chronic effects** Not available.

**Further information** Not available.

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## 12. Ecological Information

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**Ecotoxicity** Not available.

**Persistence and degradability** Not available.

**Bioaccumulative potential** Not available.

**Mobility in soil** Not available.

**Mobility in general** Not available.

**Other adverse effects** Not available.



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### 13. Disposal Considerations

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<b>Disposal instructions</b>	Review federal, provincial, and local government requirements prior to disposal. Dispose of wipe in trash after use. Do not flush.
<b>Waste from residues / unused products</b>	Not available.
<b>Contaminated packaging</b>	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

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### 14. Transport Information

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<b>General</b>	<p>Canada: TDG Proof of Classification: Classification Method: Classified as per Part 2, Sections 2.1 – 2.8 of the Transportation of Dangerous Goods Regulations. If applicable, the technical name and the classification of the product will appear below.</p> <p>Canada: TDG: Not regulated as dangerous goods.</p> <p>US: DOT: Not regulated as dangerous goods.</p> <p>IMDG: Not regulated as dangerous goods.</p> <p>IATA: Not regulated as dangerous goods.</p>
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### 15. Regulatory Information

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<b>US federal regulations</b>	<p>This product is NOT known to be a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.</p> <p>This chemical is a pesticide product registered by the United States Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets (SDS), and for workplace labels of non-pesticide chemicals. The hazard information required on the pesticide label is reproduced below. The pesticide label also includes other important information, including directions for use.</p> <p>It is a violation of Federal law to use this product in a manner inconsistent with its labeling.</p> <p>EPA 5813-79</p> <p>PRECAUTIONARY STATEMENTS: HAZARDS TO HUMANS AND DOMESTIC ANIMALS</p> <p>CAUTION: Causes moderate eye irritation. Avoid contact with eyes or clothing. Wash thoroughly with soap and water after handling.</p> <p>PHYSICAL OR CHEMICAL HAZARDS: Do not use or store near heat or open flame.</p> <p><b>TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)</b> Not regulated.</p> <p><b>CERCLA Hazardous Substance List (40 CFR 302.4)</b> Not listed.</p> <p><b>SARA 304 Emergency release notification</b> Not regulated.</p> <p><b>OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)</b> Not regulated.</p> <p><b>Superfund Amendments and Reauthorization Act of 1986 (SARA)</b></p> <table><tr><td><b>SARA 302 Extremely hazardous substance</b></td><td>No</td></tr><tr><td><b>SARA 311/312 Hazardous chemical</b></td><td>No</td></tr></table> <p><b>SARA 313 (TRI reporting)</b> Not regulated.</p> <p><b>Other federal regulations</b></p> <p><b>Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List</b> Not regulated.</p> <p><b>Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)</b> Not regulated.</p>	<b>SARA 302 Extremely hazardous substance</b>	No	<b>SARA 311/312 Hazardous chemical</b>	No
<b>SARA 302 Extremely hazardous substance</b>	No				
<b>SARA 311/312 Hazardous chemical</b>	No				

Safe Drinking Water Act (SDWA) Not regulated.

Food and Drug Administration (FDA) Not regulated.

US state regulations See below

US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)

Not listed.

California Proposition 65

This product is not subject to warning labeling under the California Proposition 65 regulation.

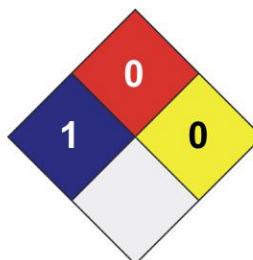
<b>Country(s) or region</b>	<b>Inventory name</b>	<b>On inventory (yes/no)*</b>
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	No

\*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s)

16. Other Information

LEGEND	
Severe	4
Serious	3
Moderate	2
Slight	1
Minimal	0

<b>HEALTH</b>	/ 1
<b>FLAMMABILITY</b>	0
<b>PHYSICAL HAZARD</b>	0
<b>PERSONAL PROTECTION</b>	X



Disclaimer

The information in the safety data sheet was written by Dell Tech Laboratories Ltd. (www.delltech.com) based on the best knowledge and experience currently available. Information contained herein was obtained from sources considered technically accurate and reliable. While every effort has been made to ensure full disclosure of product hazards, in some cases data is not available and is so stated. Since conditions of actual product use are beyond control of the supplier, it is assumed that users of this material have been fully trained according to the requirements of all applicable legislation and regulatory instruments. No warranty, expressed or implied, is made and supplier will not be liable for any losses, injuries or consequential damages which may result from the use of or reliance on any information contained in this document.

Issue date

26-July-2021

Version #

01

Further information

Not available.

Other information

For an updated SDS, please contact the supplier/manufacturer listed on the first page of the document.

Item: Not available

Reference Item: 174096.001

Prepared by: The Clorox Company, 4900 Johnson Drive, Pleasanton, CA 94588, 925-368-6000

## 1. Identificación

<b>Identificador de producto</b>	<b>Clorox Toallitas desinfectantes - Aroma fresco</b>		
<b>Otros medios de identificación</b>	EPA 5813-79		
	Número de documento: US001094		
<b>Uso recomendado</b>	Desinfectante		
<b>Restricciones recomendadas</b>	Ninguno conocido/Ninguna conocida.		
<b>Información sobre el fabricante/importador/proveedor/distribuidor</b>			
<b>Fabricante</b>			
<b>Nombre de la empresa</b>	The Clorox Company		
<b>Dirección</b>	1221 Broadway Oakland, CA 94612 Estados Unidos		
<b>Teléfono</b>	1-510-271-7000		
<b>Correo electrónico</b>	No disponible.		
<b>Número de teléfono para emergencias</b>	Emergencia médica:	1-800-446-1014	
	Emergencia de transporte:	1-800-424-9300 (Chemtrec)	

## 2. Identificación de riesgos

<b>Riesgos físicos</b>	No clasificado.
<b>Peligros para la salud</b>	No clasificado.
<b>Peligros para el medio ambiente</b>	No clasificado.
<b>Peligros definidos por OSHA</b>	No clasificado.
<b>Elementos de la etiqueta</b>	
<b>Símbolo de peligro</b>	Ninguno.
<b>Palabra de advertencia</b>	Ninguno.
<b>Indicación de peligro</b>	La mezcla no cumple con los criterios de clasificación.
<b>Consejos de prudencia</b>	
<b>Prevención</b>	Respete las normas para un manejo correcto de los químicos.
<b>Respuesta</b>	Lávese las manos después del uso.
<b>Almacenamiento</b>	Consérvese alejado de materiales incompatibles.
<b>Eliminación</b>	Eliminar el recipiente conforme a las reglamentaciones local, regional, nacional y internacional.
<b>Peligros no clasificados en otra parte (HNOC, por sus siglas en inglés)</b>	Ninguno conocido/Ninguna conocida.
<b>Información suplementaria</b>	Esta SDS está diseñada para empleados del lugar de trabajo, personal de emergencia y para otras condiciones y situaciones en las que existe un mayor potencial de exposición a gran escala o prolongada. Esta SDS no es aplicable para el uso por parte del consumidor de nuestros productos. Para el uso del consumidor, todo el lenguaje de precaución y primeros auxilios se proporciona en la etiqueta del producto de acuerdo con la normativa gubernamental aplicable.

## 3. Composición / Información sobre los ingredientes

### Mezclas

Nombre químico	Nombre común y sinónimos	Número CAS	%
n-Alkyl (C12, 68%; C14, 32%) Dimethyl Ethylbenzyl Ammonium Chloride		85409-23-0	0.184
n-Alkyl (C14, 60%; C16, 30%; C12, 5%; C18, 5%) Dimethyl Benzyl Ammonium Chloride		53516-76-0	0.184

Todas las concentraciones se expresan en porcentajes en peso a menos que el componente sea un gas. Las concentraciones de los gases se expresan en por ciento en volumen.

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#### 4. Medidas de primeros auxilios

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<b>Inhalación</b>	Si se respira, mueva a la persona al aire libre.
<b>Piel</b>	En caso de contacto con la piel, lave bien con agua.
<b>Ojos</b>	SI ENTRA EN CONTACTO CON LOS OJOS: Mantenga los ojos abiertos y enjuague lenta y suavemente con agua durante 15-20 minutos. Quítese los lentes de contacto, si los tiene, después de los primeros 5 minutos, luego continúe enjuagando los ojos. Llame a un centro de control de intoxicaciones o un médico para obtener consejos sobre el tratamiento.
<b>Ingestión</b>	En caso de ingestión, consultar inmediatamente con el médico o con el centro de control de envenenamiento. NO provoque el vómito.
<b>Síntomas/efectos más importantes, agudos o retardados</b>	El contacto directo con los ojos puede causar una irritación temporal.
<b>Indicación de la necesidad de recibir atención médica inmediata y, en su caso, de tratamiento especial</b>	Proporcione las medidas de apoyo generales y de tratamiento sintomático. Los síntomas pueden retrasarse. Tenga el envase o la etiqueta del producto con usted cuando llame a un centro de control de envenenamiento, doctor, o vaya a recibir tratamiento. Para más información, llame al (800) 227-1860
<b>Información general</b>	En caso de malestar, acuda al médico (si es posible, muéstrela la etiqueta). Muéstrela esta ficha de seguridad al doctor que esté de servicio. Evitar contacto con ojos y piel. MANTÉNGASE FUERA DEL ALCANCE DE LOS NIÑOS Y MASCOTAS.

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#### 5. Medidas para combatir incendios

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<b>Medio extintor apropiado</b>	Tratar el material circundante.
<b>Medios inadecuados</b>	No utilizar agua a presión, puede extender el incendio.
<b>Riesgos específicos derivados del producto químico</b>	En caso de incendio se pueden formar gases nocivos.
<b>Equipo especial de protección y medias de precaución para los bomberos</b>	Use aparato respiratorio autónomo y traje de protección completo en caso de incendio.
<b>Equipos/instrucciones para la lucha contra incendios</b>	Mueva los recipientes del área del incendio si puede hacerlo sin riesgo.
<b>Métodos específicos</b>	Utilizar procedimientos estándar contra incendios y considerar los riesgos de otros materiales involucrados.
<b>Riesgos generales de incendio</b>	Ningún riesgo excepcional de incendio o explosión señalado.

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#### 6. Medidas de liberación accidental

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<b>Precauciones personales, equipo protector y procedimiento de emergencia</b>	Mantenga alejado al personal que no sea necesario. Mantenga alejadas a las personas de la zona de la fuga y en sentido opuesto al viento. Use equipo y ropa de protección apropiados durante la limpieza. No toque los recipientes dañados o el material derramado a menos que esté usando ropa protectora adecuada. Asegure una ventilación apropiada. Las autoridades locales deben ser informadas si los derrames importantes no pueden contenerse. Para consultar la protección personal, véase la sección 8 de la HDS.
<b>Métodos y materiales para la contención y limpieza de vertidos</b>	Evite la entrada en vías acuáticas, alcantarillados, sótanos o áreas confinadas. Recoger y desechar toallita. Para la eliminación de los residuos, ver la Sección 13 de la HDS.
<b>Precauciones para la protección del medio ambiente</b>	No dispersar en el medio ambiente. Impidas nuevos escapes o derrames de forma segura. No verter los residuos al desagüe, al suelo o las corrientes de agua. No eliminar en lagos, arroyos, estanques o aguas públicas

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#### 7. Manejo y almacenamiento

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<b>Precauciones que se deben tomar para garantizar un manejo seguro</b>	Evitar contacto con ojos y piel. Asegúrese una ventilación eficaz. Use equipo protector personal adecuado. Colada a fondo después de dirigir. Establezca prácticas buenas de higiene industrial para la manipulación de este material. No comer ni beber durante su utilización.
<b>Condiciones de almacenamiento seguro, incluida cualquier incompatibilidad</b>	No usar ni almacenar cerca del fuego o de la llama abierta. Almacenar alejado de materiales incompatibles (véase la Sección 10 de la HDS). MANTÉNGASE FUERA DEL ALCANCE DE LOS NIÑOS.

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#### 8. Controles de exposición y protección personal

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<b>Valores límites biológicos</b>	No se indican límites de exposición biológica para los componentes.
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<b>Controles técnicos apropiados</b>	Debe haber una ventilación general adecuada (típicamente 10 renovaciones del aire por hora). La frecuencia de la renovación del aire debe corresponder a las condiciones. De ser posible, use campanas extractoras, ventilación aspirada local u otras medidas técnicas para mantener los niveles de exposición por debajo de los límites de exposición recomendados. Si no se han establecido ningunos límites de exposición, el nivel de contaminantes suspendidos en el aire ha de mantenerse a un nivel aceptable.
<b>Medidas de protección individual, como equipos de protección personal recomendados</b>	
<b>Protección para los ojos/la cara</b>	Normalmente no es necesario bajo condiciones normales de uso.
<b>Protección de la piel</b>	
<b>Protección para las manos</b>	Requerido no normalmente cuando está utilizado según lo dirigido. Para uso prolongado, use guantes de goma
<b>Otros</b>	Use ropa adecuada resistente a los productos químicos. Como sea requerido por las normas del empleador.
<b>Protección respiratoria</b>	Donde los niveles de la pauta de la exposición pueden ser excedidos, utilice un respirador aprobado de NIOSH. La máscara de respiración deberá ser seleccionada y utilizada bajo la dirección de personal capacitado en salud y seguridad, y en un todo de acuerdo con lo establecido por las pautas y criterios respectivos de OSHA (29 CFR 1910.134), CAN/CSA-Z94.4 y de ANSI sobre protección respiratoria (Z88.2).
<b>Peligros térmicos</b>	No aplicable.
<b>Consideraciones generales sobre higiene</b>	Lávese las manos antes de los descansos e inmediatamente después de manipular la substancia. Seguir siempre buenas medidas de higiene personal, como lavarse después de manejar el material y antes de comer, beber y/o fumar. Rutinariamente lave la ropa de trabajo y el equipo de protección para eliminar los contaminantes. No comer ni beber durante su utilización.

## 9. Propiedades físicas y químicas

<b>Aspecto</b>	Claro
<b>Estado físico</b>	Líquido.
<b>Estado físico</b>	Líquido saturado en servilleta.
<b>Color</b>	clear liquid on a wipe
<b>Olor</b>	Olor a frutas, Manzana, Floral
<b>Umbral de olor</b>	No disponible.
<b>pH</b>	6 - 9 (Líquido)
<b>Punto de fusión/punto de congelación</b>	No disponible.
<b>Punto inicial e intervalo de ebullición</b>	No disponible.
<b>Punto de escurrimiento</b>	No disponible.
<b>Peso específico</b>	No disponible.
<b>Coefficiente de reparto: n-octanol/agua</b>	No disponible.
<b>Punto de inflamabilidad</b>	No disponible.
<b>Tasa de evaporación</b>	No disponible.
<b>Inflamabilidad (sólido, gas)</b>	No aplicable.
<b>Límites superior/inferior de inflamabilidad o explosividad</b>	
<b>Límite inferior de inflamabilidad (%)</b>	No disponible.
<b>Límite superior de inflamabilidad (%)</b>	No disponible.
<b>Límite inferior de explosividad (%)</b>	No disponible.
<b>Límite superior de explosividad (%)</b>	No disponible.
<b>Presión de vapor</b>	No disponible.
<b>Densidad de vapor</b>	No disponible.
<b>Densidad relativa</b>	1 (Líquido)
<b>Solubilidad(es)</b>	Toallita no es soluble
<b>Temperatura de autoignición</b>	No disponible.
<b>Temperatura de descomposición</b>	No disponible.

Viscosidad No disponible.

## 10. Estabilidad y reactividad

**Reactividad** Este producto puede reaccionar con agentes oxidantes fuertes.  
**Posibilidad de reacciones peligrosas** Ninguno bajo el uso normal.  
**Estabilidad química** El material es estable bajo condiciones normales.  
**Condiciones a evitar** No mezclar con otros productos químicos.  
**Materiales incompatibles** Oxidantes. Ácidos.  
**Productos de descomposición peligrosos** Pueden incluir y no están limitados a: Óxidos de carbono. Óxidos de nitrógeno. Ammoníaco. Cloro.

## 11. Información toxicológica

### Información sobre las posibles vías de exposición

**Inhalación** No se esperan efectos adversos debido a inhalación.  
La inhalación intencional y excesiva puede causar la irritación del sistema respiratorio.  
**Piel** No se espera que sea un irritante primario de la piel.  
**Ojos** El contacto directo con los ojos puede causar una irritación temporal.  
**Ingestión** Puede causar problemas digestivos, náuseas o vómitos.

**Síntomas relacionados con las características físicas, químicas y toxicológicas** El contacto directo con los ojos puede causar una irritación temporal.

### Información sobre los efectos toxicológicos

**Toxicidad aguda** Vea abajo

Componentes	Especies	Resultados de la prueba
n-Alkyl (C12, 68%; C14, 32%) Dimethyl Ethylbenzyl Ammonium Chloride (CAS 85409-23-0)		

#### Agudo

*Dérmico*

DL50	conejo	2300 mg/kg, ECHA
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*Inhalación*

CL50	No disponible	
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*Oral*

DL50	rata	344 mg/kg, ECHA
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**Corrosión/irritación cutáneas** No se espera que sea un irritante primario de la piel.

**Minutos de exposición** No disponible.

**Valor de eritema** No disponible.

**Valor del edema** No disponible.

**Lesiones oculares graves/irritación ocular** El contacto directo con los ojos puede causar una irritación temporal.

**Valor de opacidad corneal** No disponible.

**Valor de la lesión del iris** No disponible.

**Valor del enrojecimiento conjuntival** No disponible.

**Valor del edema conjuntivo** No disponible.

**Días de recuperación** No disponible.

### Sensibilidad respiratoria o cutánea

**Sensibilización respiratoria** No disponible.

**Sensibilización cutánea** No disponible.

**Mutagenicidad en células germinales** No disponible.

### Carcinogenicidad

**Monografías del IARC. Evaluación general de la carcinogenicidad**

No listado.

**OSHA Sustancias específicas reguladas (29 CFR 1910.1001-1052)**

No regulado.

## Programa Nacional de Toxicología de EUA (NTP). Reporte sobre carcinógenos

No listado.

<b>Toxicidad para la reproducción</b>	No se espera que este producto cause efectos reproductivos o al desarrollo.
<b>Toxicidad sistémica específica de órganos diana - Exposición única</b>	No disponible.
<b>Toxicidad sistémica específica de órganos diana - Exposiciones repetidas</b>	No disponible.
<b>Peligro por aspiración</b>	No representa un peligro de aspiración.
<b>Efectos crónicos</b>	No disponible.
<b>Información adicional</b>	No disponible.

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### 12. Información ecológica

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<b>Efectos ecotoxicológicos</b>	No disponible.
<b>Persistencia y degradabilidad</b>	No disponible.
<b>Potencial de bioacumulación</b>	No disponible.
<b>Movilidad en el suelo</b>	No disponible.
<b>Movilidad en general</b>	No disponible.
<b>Otros efectos adversos</b>	No disponible.

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### 13. Consideraciones de eliminación

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<b>Instrucciones para la eliminación</b>	Consultar los requerimientos de los gobiernos federales, provinciales y municipales antes de la eliminación. Eliminar la toallita en la basura después del uso. No enjuague.
<b>Residuos/producto no utilizado</b>	No disponible.
<b>Envases contaminados</b>	Ya que los recipientes vacíos pueden contener restos de producto, obsérvense las advertencias indicadas en la etiqueta después de vaciarse el recipiente. Los contenedores vacíos deben ser llevados a un sitio de manejo aprobado para desechos, para el reciclado o eliminación.

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### 14. Información relativa al transporte

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<b>General</b>	<p>Canadá: TDG prueba de clasificación: Método de Clasificación: Clasificados según la parte 2, secciones 2,1 – 2,8 del Reglamento de transporte de mercancías peligrosas. En su caso, el nombre del técnico y la clasificación del producto aparecerá debajo.</p> <p>Canada: TDG: No está clasificado como producto peligroso.</p> <p>US: DOT: No está clasificado como producto peligroso.</p> <p>IMDG: No está clasificado como producto peligroso.</p> <p>IATA: No está clasificado como producto peligroso.</p>
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## 15. Información reguladora

### Reglamentos federales de EE.UU.

Este producto no se sabe para ser un "producto químico peligroso" según lo definido por OSHA Hazard Communication Standard, 29 CFR 1910.1200.

Este producto químico es un producto pesticida registrado por la Agencia de Protección Ambiental de los Estados Unidos y está sujeta a determinados requisitos de etiquetado bajo la ley federal de pesticidas. Estos requisitos difieren de los criterios de clasificación y la información sobre riesgos necesarios para las fichas de datos de seguridad (FDS) y el lugar de trabajo para las etiquetas de productos químicos sin pesticidas. La información sobre el peligro requerido en la etiqueta del pesticida se reproduce a continuación. La etiqueta del pesticida también incluye otra información importante, incluidas las instrucciones de uso.

Constituye una violación a la ley federal el uso de este producto de una forma contraria a lo indicado en la etiqueta.

EPA 5813-79

PRECAUCIONES DE SEGURIDAD: Peligro para los seres humanos y animales domésticos.

PRECAUCIÓN: Provoca moderada irritación ocular. Evite el contacto con los ojos o ropa. Lavar a fondo con agua y jabón después del uso.

RIESGOS FÍSICOS O QUÍMICOS: No usar ni almacenar cerca del fuego o de la llama abierta.

### TSCA Section 12(b) Export Notification (40 CFR 707, Subapartado D) (Notificación de exportación)

No regulado.

### Lista de sustancias peligrosas de CERCLA (40 CFR 302.4)

No listado.

### SARA Sección 304 Notificación de emergencia sobre la liberación de sustancias

No regulado.

### OSHA Sustancias específicas reguladas (29 CFR 1910.1001-1052)

No regulado.

### Ley de Enmiendas y Reautorización del Superfondo de 1986 (SARA)

SARA 302 Sustancia extremadamente peligrosa No

SARA 311/312 Sustancias químicas peligrosas No

### SARA 313 (Reporte TRI, acerca del Inventario de liberación de sustancias tóxicas)

No regulado.

### Otras disposiciones federales

#### Ley de Aire Limpio (CAA), sección 112, lista de contaminantes peligrosos del aire (CPA)

No regulado.

#### Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130) (Ley de aire limpio, Prevención de liberación accidental)

No regulado.

Ley de Agua Potable Segura (SDWA, siglas en inglés) No regulado.

Dirección de Alimentos y Medicamentos de los EUA (FDA) No regulado.

### Regulaciones de un estado de EUA

#### Sustancias Controladas de California; EUA. Departamento de Justicia, CA (Salud y Seguridad de California, Código de Sección 11100)

No listado.

#### Proposición 65 de California

Este producto no está sujeto a etiquetado de advertencia según la Proposición 65 del Estado de California.

<b>País(es) o región</b>	<b>Nombre del inventario</b>	<b>Listado (sí/no)*</b>
Estados Unidos y Puerto Rico	Inventario de la Ley del Control de Sustancias Tóxicas (TSCA)	No

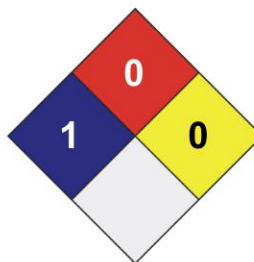
\*\*"Sí" indica que este producto cumple con los requisitos del inventario administrado por el(los) país(es) responsable(s)



## 16. Otra información

REFERENCIA	
Severo	4
Serio	3
Moderado	2
Ligera	1
Mínimo	0

Salud	/ 1
Flamabilidad	0
Riesgos Físicos	0
Protección Personal	X



### Cláusula de exención de responsabilidad

La información de esta hoja de datos de seguridad se ha escrito por Dell Tech Laboratories Ltd. (www.delltech.com) sobre la base del nivel actual de conocimientos y experiencia disponible. La información aquí contenida fue obtenida de fuentes que se estiman técnicamente precisas y confiables. Si bien se han realizado los máximos esfuerzos posibles a fin de asegurar la total puesta en conocimiento de los riesgos asociados a este producto, como en algunos casos no es posible obtener información, se lo declara expresamente. Dado que las condiciones particulares de uso del producto están más allá del alcance del proveedor, se presupone que los usuarios de este material han sido correctamente entrenados según las exigencias de toda la legislación aplicable y demás instrumentos regulatorios. El proveedor no efectúa ninguna garantía, expresa ni tácita, y no será responsable por ninguna pérdida, daños o consecuencia dañina que pueda resultar del uso o de la confiabilidad de cualquier información contenida en este documento.

### Fecha de emisión

26-Julio-2021

### Indicación de la versión

01

### Información adicional

No disponible.

### Otra información

Para obtener una Hoja de Datos de Seguridad actualizada, por favor póngase en contacto con el distribuidor /el fabricante que figura en la primera página de este documento.

Artículo: No disponible

Artículo de referencia: 174096.001

Preparado por: The Clorox Company, 4900 Johnson Drive, Pleasanton, CA 94588, 925-368-6000



# SAFETY DATA SHEET

Issuing Date January 5, 2015

Revision Date New

Revision Number 0

## **1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING**

### Product identifier

Product Name Clorox® Germicidal Bleach<sub>1</sub>

### Other means of identification

EPA Registration Number 5813-102

### Recommended use of the chemical and restrictions on use

Recommended use Institutional hard surface disinfecting and sanitizing bleach

Uses advised against No information available

### Details of the supplier of the safety data sheet

#### **Supplier Address**

The Clorox Company  
1221 Broadway  
Oakland, CA 94612

Phone: 1-510-271-7000

### Emergency telephone number

#### **Emergency Phone Numbers**

For Medical Emergencies, call: 1-800-446-1014  
For Transportation Emergencies, call Chemtrec: 1-800-424-9300

## 2. HAZARDS IDENTIFICATION


### Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

Skin corrosion/irritation	Category 1
Serious eye damage/eye irritation	Category 1

### GHS Label elements, including precautionary statements

#### Emergency Overview

<b>Signal word</b>	<b>Danger</b>	
<b>Hazard Statements</b>	Causes severe skin burns and eye damage Causes serious eye damage	
		
<b>Appearance</b>	Clear, pale yellow	<b>Physical State</b> Thin liquid
		<b>Odor</b> Bleach

#### Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling.  
 Wear protective gloves, protective clothing, face protection, and eye protection such as safety glasses.

#### Precautionary Statements - Response

Immediately call a poison center or doctor.  
 If swallowed: Rinse mouth. Do NOT induce vomiting.  
 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water.  
 Wash contaminated clothing before reuse.  
 If inhaled: Remove person to fresh air and keep comfortable for breathing.  
 Specific treatment (see supplemental first aid instructions on this label).  
 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

#### Precautionary Statements - Storage

Store locked up.

#### Precautionary Statements - Disposal

Dispose of contents in accordance with all applicable federal, state, and local regulations.

#### Hazards not otherwise classified (HNOC)

Although not expected, heart conditions or chronic respiratory problems such as asthma, chronic bronchitis, or obstructive lung disease may be aggravated by exposure to high concentrations of vapor or mist.

Product contains a strong oxidizer. Always flush drains before and after use.

**Unknown Toxicity**

Not applicable.

**Other information**

Very toxic to aquatic life with long lasting effects.

**Interactions with Other Chemicals**

Reacts with other household chemicals such as toilet bowl cleaners, rust removers, acids, or products containing ammonia to produce hazardous irritating gases, such as chlorine and other chlorinated compounds.

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

Chemical Name	CAS-No	Weight %	Trade Secret
Sodium hypochlorite	7681-52-9	5 - 10	*

\* The exact percentage (concentration) of composition has been withheld as a trade secret.

**4. FIRST AID MEASURES****First aid measures**

<b>General Advice</b>	Call a poison control center or doctor immediately for treatment advice. Show this safety data sheet to the doctor in attendance.
<b>Eye Contact</b>	Hold eye open and rinse slowly and gently with water for 15 - 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.
<b>Skin Contact</b>	Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.
<b>Inhalation</b>	Move to fresh air. If breathing is affected, call a doctor.
<b>Ingestion</b>	Have person sip a glassful of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person. Call a poison control center or doctor immediately for treatment advice.
<b>Protection of First-aiders</b>	Avoid contact with skin, eyes, and clothing. Use personal protective equipment as required. Wear personal protective clothing (see section 8).

**Most important symptoms and effects, both acute and delayed**

**Most Important Symptoms and Effects** Burning of eyes and skin.

**Indication of any immediate medical attention and special treatment needed**

**Notes to Physician** Treat symptomatically. Probable mucosal damage may contraindicate the use of gastric lavage.

## 5. FIRE-FIGHTING MEASURES

### Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

### Unsuitable Extinguishing Media

CAUTION: Use of water spray when fighting fire may be inefficient.

### Specific Hazards Arising from the Chemical

This product causes burns to eyes, skin, and mucous membranes. Thermal decomposition can release sodium chlorate and irritating gases and vapors.

### Explosion Data

**Sensitivity to Mechanical Impact**      None.

**Sensitivity to Static Discharge**      None.

### Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

## 6. ACCIDENTAL RELEASE MEASURES

### Personal precautions, protective equipment and emergency procedures

**Personal Precautions**                      Avoid contact with eyes, skin, and clothing. Ensure adequate ventilation. Use personal protective equipment as required. For spills of multiple products, responders should evaluate the MSDSs of the products for incompatibility with sodium hypochlorite. Breathing protection should be worn in enclosed and/or poorly-ventilated areas until hazard assessment is complete.

**Other Information**                        Refer to protective measures listed in Sections 7 and 8.

### Environmental precautions

**Environmental Precautions**            This product is toxic to fish, aquatic invertebrates, oysters, and shrimp. Do not allow product to enter storm drains, lakes, or streams. See Section 12 for ecological information.

### Methods and material for containment and cleaning up

**Methods for Containment**              Prevent further leakage or spillage if safe to do so.

**Methods for Cleaning Up**                Absorb and containerize. Wash residual down to sanitary sewer. Contact the sanitary treatment facility in advance to assure ability to process washed-down material.

## 7. HANDLING AND STORAGE

### Precautions for safe handling

**Handling** Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes, and clothing. Do not eat, drink, or smoke when using this product.

### Conditions for safe storage, including any incompatibilities

**Storage** Store away from children. Reclose cap tightly after each use. Store this product upright in a cool, dry area, away from direct sunlight and heat to avoid deterioration. Do not contaminate food or feed by storage of this product.

**Incompatible Products** Toilet bowl cleaners, rust removers, acids, and products containing ammonia.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

#### Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Sodium hypochlorite 7681-52-9	None	None	None

ACGIH TLV: American Conference of Governmental Industrial Hygienists - Threshold Limit Value. OSHA PEL: Occupational Safety and Health Administration - Permissible Exposure Limits. NIOSH IDLH: Immediately Dangerous to Life or Health.

### Appropriate engineering controls

**Engineering Measures** Showers  
Eyewash stations  
Ventilation systems

### Individual protection measures, such as personal protective equipment

**Eye/Face Protection** If splashes are likely to occur: Wear safety glasses with side shields (or goggles) or face shield.

**Skin and Body Protection** Wear rubber or neoprene gloves and protective clothing such as long-sleeved shirt.

**Respiratory Protection** If irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

**Hygiene Measures** Handle in accordance with good industrial hygiene and safety practice. Wash hands after direct contact. Do not wear product-contaminated clothing for prolonged periods. Remove and wash contaminated clothing before re-use. Do not eat, drink, or smoke when using this product.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Physical and Chemical Properties

<b>Physical State</b> <b>Appearance</b> <b>Color</b>	Thin liquid Clear Pale yellow	<b>Odor</b> <b>Odor Threshold</b>	Bleach No information available
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<u>Property</u>	<u>Values</u>	<u>Remarks/ Method</u>
pH	~12	None known
Melting/freezing point	No data available	None known
Boiling point / boiling range	No data available	None known
Flash Point	Not flammable	None known
Evaporation rate	No data available	None known
Flammability (solid, gas)	No data available	None known
Flammability Limits in Air		
Upper flammability limit	No data available	None known
Lower flammability limit	No data available	None known
Vapor pressure	No data available	None known
Vapor density	No data available	None known
Specific Gravity	~1.1	None known
Water Solubility	Soluble	None known
Solubility in other solvents	No data available	None known
Partition coefficient: n-octanol/water	No data available	None known
Autoignition temperature	No data available	None known
Decomposition temperature	No data available	None known
Kinematic viscosity	No data available	None known
Dynamic viscosity	No data available	None known
Explosive Properties	Not explosive	
Oxidizing Properties	No data available	

<u>Other Information</u>	
Softening Point	No data available
VOC Content (%)	No data available
Particle Size	No data available
Particle Size Distribution	No data available

## 10. STABILITY AND REACTIVITY

### Reactivity

Reacts with other household chemicals such as toilet bowl cleaners, rust removers, acids, or products containing ammonia to produce hazardous irritating gases, such as chlorine and other chlorinated compounds.

### Chemical stability

Stable under recommended storage conditions.

### Possibility of Hazardous Reactions

None under normal processing.

### Conditions to avoid

None known based on information supplied.

### Incompatible materials

Toilet bowl cleaners, rust removers, acids, and products containing ammonia.

### Hazardous Decomposition Products

None known based on information supplied.

**11. TOXICOLOGICAL INFORMATION**

**Information on likely routes of exposure**

**Product Information**

- Inhalation** Exposure to vapor or mist may irritate respiratory tract and cause coughing. Inhalation of high concentrations may cause pulmonary edema.
- Eye Contact** Corrosive. May cause severe damage to eyes.
- Skin Contact** May cause severe irritation to skin. Prolonged contact may cause burns to skin.
- Ingestion** Ingestion may cause burns to gastrointestinal tract and respiratory tract, nausea, vomiting, and diarrhea.

**Component Information**

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Sodium hypochlorite 7681-52-9	8200 mg/kg (Rat)	>10000 mg/kg (Rabbit)	-

**Information on toxicological effects**

**Symptoms** May cause redness and tearing of the eyes. May cause burns to eyes. May cause redness or burns to skin. Inhalation may cause coughing.

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

- Sensitization** No information available.
- Mutagenic Effects** No information available.
- Carcinogenicity** The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical Name	ACGIH	IARC	NTP	OSHA
Sodium hypochlorite 7681-52-9	-	Group 3	-	-

*IARC (International Agency for Research on Cancer)  
Group 3 - Not Classifiable as to Carcinogenicity in Humans*

- Reproductive Toxicity** No information available.
- STOT - single exposure** No information available.
- STOT - repeated exposure** No information available.
- Chronic Toxicity** Carcinogenic potential is unknown.
- Target Organ Effects** Respiratory system, eyes, skin, gastrointestinal tract (GI).
- Aspiration Hazard** No information available.



**Numerical measures of toxicity - Product Information**

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral)  
 54 g/kg  
 ATEmix (inhalation-dust/mist)  
 58 mg/L

**12. ECOLOGICAL INFORMATION**

**Ecotoxicity**

Very toxic to aquatic life with long lasting effects.

This product is toxic to fish, aquatic invertebrates, oysters, and shrimp. Do not allow product to enter storm drains, lakes, or streams.

**Persistence and Degradability**

No information available.

**Bioaccumulation**

No information available.

**Other adverse effects**

No information available.

**13. DISPOSAL CONSIDERATIONS**

**Disposal methods**

Dispose of in accordance with all applicable federal, state, and local regulations. Do not contaminate food or feed by disposal of this product.

**Contaminated Packaging**

Do not reuse empty containers. Dispose of in accordance with all applicable federal, state, and local regulations.

**14. TRANSPORT INFORMATION**

**DOT** NOT REGULATED.

**TDG**

<b>UN-No</b>	UN3082
<b>Proper Shipping Name</b>	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
<b>Hazard Class</b>	9
<b>Packing Group</b>	III
<b>Description</b>	UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (SODIUM HYPOCHLORITE), 9, III, MARINE POLLUTANT

**ICAO**

<b>UN-No</b>	UN3082
<b>Proper Shipping Name</b>	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
<b>Hazard Class</b>	9
<b>Packing Group</b>	III
<b>Description</b>	UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (SODIUM HYPOCHLORITE), 9, III

**IATA**

<b>UN-No</b>	UN3082
<b>Proper Shipping Name</b>	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
<b>Hazard Class</b>	9
<b>Packing Group</b>	III
<b>Description</b>	UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (SODIUM HYPOCHLORITE), 9, III

**IMDG/IMO**

<b>UN-No</b>	UN3082
<b>Proper Shipping Name</b>	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
<b>Hazard Class</b>	9
<b>Packing Group</b>	III
<b>EmS No.</b>	F-A, S-F
<b>Marine Pollutant</b>	Product is a marine pollutant according to the criteria set by IMDG/IMO
<b>Description</b>	UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (SODIUM HYPOCHLORITE), 9, III, MARINE POLLUTANT

**15. REGULATORY INFORMATION****Chemical Inventories**

**TSCA** All components of this product are either on the TSCA 8(b) Inventory or otherwise exempt from listing.

**DSL/NDSL** All components are on the DSL or NDSL.

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory  
**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List

**U.S. Federal Regulations****SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

**SARA 311/312 Hazard Categories**

<b>Acute Health Hazard</b>	Yes
<b>Chronic Health Hazard</b>	No
<b>Fire Hazard</b>	No
<b>Sudden Release of Pressure Hazard</b>	No
<b>Reactive Hazard</b>	No

**Clean Water Act**

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Sodium hypochlorite 7681-52-9	100 lb			X

**CERCLA**

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical Name	Hazardous Substances RQs	Extremely Hazardous Substances RQs	RQ
Sodium hypochlorite 7681-52-9	100 lb	-	RQ 100 lb final RQ RQ 45.4 kg final RQ

**EPA Statement**

This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label:

**DANGER: CORROSIVE.** Causes irreversible eye damage and skin burns. Harmful if swallowed. Do not get in eyes, on skin, or on clothing. Wear protective eyewear, protective clothing, and rubber gloves when handling this product. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the restroom. Avoid breathing vapors and use only in a well-ventilated area. Remove and wash contaminated clothing before reuse.

**US State Regulations**

**California Proposition 65**

This product does not contain any Proposition 65 chemicals.

**U.S. State Right-to-Know Regulations**

Chemical Name	New Jersey	Massachusetts	Pennsylvania	Rhode Island	Illinois
Sodium hypochlorite 7681-52-9	X	X	X	X	
Sodium chlorate 7775-09-9	X	X	X		

**International Regulations**

**Canada**

**WHMIS Hazard Class**

E - Corrosive material



**16. OTHER INFORMATION**

**NFPA**      Health Hazard 3      Flammability 0      Instability 0      Physical and Chemical Hazards -

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**HMIS**      Health Hazard 3      Flammability 0      Physical Hazard 0      Personal Protection B

**Prepared By**                      Product Stewardship  
23 British American Blvd.  
Latham, NY 12110  
1-800-572-6501

**Revision Date**                      New

**Revision Note**                      New

**Reference**                              1064453/166081.094

**General Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal, and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**End of Safety Data Sheet**



# SAFETY DATA SHEET

Issuing Date January 5, 2015

Revision Date New

Revision Number 0

## **1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING**

### Product identifier

Product Name Clorox® Regular Bleach

### Other means of identification

EPA Registration Number 5813-100

### Recommended use of the chemical and restrictions on use

Recommended use Household disinfecting, sanitizing, and laundry bleach

Uses advised against No information available

### Details of the supplier of the safety data sheet

#### **Supplier Address**

The Clorox Company  
1221 Broadway  
Oakland, CA 94612

Phone: 1-510-271-7000

### Emergency telephone number

#### **Emergency Phone Numbers**

For Medical Emergencies, call: 1-800-446-1014  
For Transportation Emergencies, call Chemtrec: 1-800-424-9300

**2. HAZARDS IDENTIFICATION**


**Classification**

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

Skin corrosion/irritation	Category 1
Serious eye damage/eye irritation	Category 1

**GHS Label elements, including precautionary statements**

**Emergency Overview**

<b>Signal word</b>	<b>Danger</b>		
<b>Hazard Statements</b>	Causes severe skin burns and eye damage Causes serious eye damage		
			
<b>Appearance</b>	Clear, pale yellow	<b>Physical State</b>	Thin liquid
		<b>Odor</b>	Bleach

**Precautionary Statements - Prevention**

Wash face, hands and any exposed skin thoroughly after handling.  
 Wear protective gloves, protective clothing, face protection, and eye protection such as safety glasses.

**Precautionary Statements - Response**

Immediately call a poison center or doctor.  
 If swallowed: Rinse mouth. Do NOT induce vomiting.  
 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water.  
 Wash contaminated clothing before reuse.  
 If inhaled: Remove person to fresh air and keep comfortable for breathing.  
 Specific treatment (see supplemental first aid instructions on this label).  
 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

**Precautionary Statements - Storage**

Store locked up.

**Precautionary Statements - Disposal**

Dispose of contents in accordance with all applicable federal, state, and local regulations.

**Hazards not otherwise classified (HNOC)**

Although not expected, heart conditions or chronic respiratory problems such as asthma, chronic bronchitis, or obstructive lung disease may be aggravated by exposure to high concentrations of vapor or mist.

Product contains a strong oxidizer. Always flush drains before and after use.

**Unknown Toxicity**

Not applicable.

**Other information**

Very toxic to aquatic life with long lasting effects.

**Interactions with Other Chemicals**

Reacts with other household chemicals such as toilet bowl cleaners, rust removers, acids, or products containing ammonia to produce hazardous irritating gases, such as chlorine and other chlorinated compounds.

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

Chemical Name	CAS-No	Weight %	Trade Secret
Sodium hypochlorite	7681-52-9	5 - 10	*

\* The exact percentage (concentration) of composition has been withheld as a trade secret.

**4. FIRST AID MEASURES****First aid measures****General Advice**

Call a poison control center or doctor immediately for treatment advice. Show this safety data sheet to the doctor in attendance.

**Eye Contact**

Hold eye open and rinse slowly and gently with water for 15 - 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

**Skin Contact**

Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

**Inhalation**

Move to fresh air. If breathing is affected, call a doctor.

**Ingestion**

Have person sip a glassful of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person. Call a poison control center or doctor immediately for treatment advice.

**Protection of First-aiders**

Avoid contact with skin, eyes, and clothing. Use personal protective equipment as required. Wear personal protective clothing (see section 8).

**Most important symptoms and effects, both acute and delayed****Most important Symptoms and Effects**

Burning of eyes and skin.

**Indication of any immediate medical attention and special treatment needed****Notes to Physician**

Treat symptomatically. Probable mucosal damage may contraindicate the use of gastric lavage.

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**5. FIRE-FIGHTING MEASURES**

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**Suitable Extinguishing Media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable Extinguishing Media**

CAUTION: Use of water spray when fighting fire may be inefficient.

**Specific Hazards Arising from the Chemical**

This product causes burns to eyes, skin, and mucous membranes. Thermal decomposition can release sodium chlorate and irritating gases and vapors.

**Explosion Data**

**Sensitivity to Mechanical Impact** None.

**Sensitivity to Static Discharge** None.

**Protective equipment and precautions for firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

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**6. ACCIDENTAL RELEASE MEASURES**

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**Personal precautions, protective equipment and emergency procedures****Personal Precautions**

Avoid contact with eyes, skin, and clothing. Ensure adequate ventilation. Use personal protective equipment as required. For spills of multiple products, responders should evaluate the MSDSs of the products for incompatibility with sodium hypochlorite. Breathing protection should be worn in enclosed and/or poorly-ventilated areas until hazard assessment is complete.

**Other Information**

Refer to protective measures listed in Sections 7 and 8.

**Environmental precautions****Environmental Precautions**

This product is toxic to fish, aquatic invertebrates, oysters, and shrimp. Do not allow product to enter storm drains, lakes, or streams. See Section 12 for ecological information.

**Methods and material for containment and cleaning up****Methods for Containment**

Prevent further leakage or spillage if safe to do so.

**Methods for Cleaning Up**

Absorb and containerize. Wash residual down to sanitary sewer. Contact the sanitary treatment facility in advance to assure ability to process washed-down material.



## 7. HANDLING AND STORAGE

### Precautions for safe handling

**Handling** Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes, and clothing. Do not eat, drink, or smoke when using this product.

### Conditions for safe storage, including any incompatibilities

**Storage** Store away from children. Reclose cap tightly after each use. Store this product upright in a cool, dry area, away from direct sunlight and heat to avoid deterioration. Do not contaminate food or feed by storage of this product.

**Incompatible Products** Toilet bowl cleaners, rust removers, acids, and products containing ammonia.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

#### Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Sodium hypochlorite 7681-52-9	None	None	None

ACGIH TLV: American Conference of Governmental Industrial Hygienists - Threshold Limit Value. OSHA PEL: Occupational Safety and Health Administration - Permissible Exposure Limits. NIOSH IDLH: Immediately Dangerous to Life or Health.

### Appropriate engineering controls

**Engineering Measures** Showers  
Eyewash stations  
Ventilation systems

### Individual protection measures, such as personal protective equipment

**Eye/Face Protection** If splashes are likely to occur: Wear safety glasses with side shields (or goggles) or face shield.

**Skin and Body Protection** Wear rubber or neoprene gloves and protective clothing such as long-sleeved shirt.

**Respiratory Protection** If irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

**Hygiene Measures** Handle in accordance with good industrial hygiene and safety practice. Wash hands after direct contact. Do not wear product-contaminated clothing for prolonged periods. Remove and wash contaminated clothing before re-use. Do not eat, drink, or smoke when using this product.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Physical and Chemical Properties

Physical State	Thin liquid	Odor	Bleach
Appearance	Clear	Odor Threshold	No information available
Color	Pale yellow		

Property	Values	Remarks/ Method
pH	~12	None known
Melting/freezing point	No data available	None known
Boiling point / boiling range	No data available	None known
Flash Point	Not flammable	None known
Evaporation rate	No data available	None known
Flammability (solid, gas)	No data available	None known
Flammability Limits in Air		
Upper flammability limit	No data available	None known
Lower flammability limit	No data available	None known
Vapor pressure	No data available	None known
Vapor density	No data available	None known
Specific Gravity	~1.1	None known
Water Solubility	Soluble	None known
Solubility in other solvents	No data available	None known
Partition coefficient: n-octanol/water	No data available	None known
Autoignition temperature	No data available	None known
Decomposition temperature	No data available	None known
Kinematic viscosity	No data available	None known
Dynamic viscosity	No data available	None known
Explosive Properties	Not explosive	
Oxidizing Properties	No data available	

### Other Information

Softening Point	No data available
VOC Content (%)	No data available
Particle Size	No data available
Particle Size Distribution	No data available

## 10. STABILITY AND REACTIVITY

### Reactivity

Reacts with other household chemicals such as toilet bowl cleaners, rust removers, acids, or products containing ammonia to produce hazardous irritating gases, such as chlorine and other chlorinated compounds.

### Chemical stability

Stable under recommended storage conditions.

### Possibility of Hazardous Reactions

None under normal processing.

### Conditions to avoid

None known based on information supplied.

### Incompatible materials

Toilet bowl cleaners, rust removers, acids, and products containing ammonia.

### Hazardous Decomposition Products

None known based on information supplied.

## 11. TOXICOLOGICAL INFORMATION

### Information on likely routes of exposure

#### Product Information

<b>Inhalation</b>	Exposure to vapor or mist may irritate respiratory tract and cause coughing. Inhalation of high concentrations may cause pulmonary edema.
<b>Eye Contact</b>	Corrosive. May cause severe damage to eyes.
<b>Skin Contact</b>	May cause severe irritation to skin. Prolonged contact may cause burns to skin.
<b>Ingestion</b>	Ingestion may cause burns to gastrointestinal tract and respiratory tract, nausea, vomiting, and diarrhea.

#### Component Information

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Sodium hypochlorite 7681-52-9	8200 mg/kg (Rat)	>10000 mg/kg (Rabbit)	-

### Information on toxicological effects

<b>Symptoms</b>	May cause redness and tearing of the eyes. May cause burns to eyes. May cause redness or burns to skin. Inhalation may cause coughing.
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### Delayed and immediate effects as well as chronic effects from short and long-term exposure

<b>Sensitization</b>	No information available.
<b>Mutagenic Effects</b>	No information available.
<b>Carcinogenicity</b>	The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical Name	ACGIH	IARC	NTP	OSHA
Sodium hypochlorite 7681-52-9	-	Group 3	-	-

*IARC (International Agency for Research on Cancer)  
Group 3 - Not Classifiable as to Carcinogenicity in Humans*

<b>Reproductive Toxicity</b>	No information available.
<b>STOT - single exposure</b>	No information available.
<b>STOT - repeated exposure</b>	No information available.
<b>Chronic Toxicity</b>	Carcinogenic potential is unknown.
<b>Target Organ Effects</b>	Respiratory system, eyes, skin, gastrointestinal tract (GI).
<b>Aspiration Hazard</b>	No information available.

**Numerical measures of toxicity - Product Information**

The following values are calculated based on chapter 3.1 of the GHS document

**ATEmix (oral)**

54 g/kg

**ATEmix (inhalation-dust/mist)**

58 mg/L

**12. ECOLOGICAL INFORMATION****Ecotoxicity**

Very toxic to aquatic life with long lasting effects.

This product is toxic to fish, aquatic invertebrates, oysters, and shrimp. Do not allow product to enter storm drains, lakes, or streams.

**Persistence and Degradability**

No information available.

**Bioaccumulation**

No information available.

**Other adverse effects**

No information available.

**13. DISPOSAL CONSIDERATIONS****Disposal methods**

Dispose of in accordance with all applicable federal, state, and local regulations. Do not contaminate food or feed by disposal of this product.

**Contaminated Packaging**

Do not reuse empty containers. Dispose of in accordance with all applicable federal, state, and local regulations.

**14. TRANSPORT INFORMATION****DOT**

NOT REGULATED.

**TDG**

<b>UN-No</b>	UN3082
<b>Proper Shipping Name</b>	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
<b>Hazard Class</b>	9
<b>Packing Group</b>	III
<b>Description</b>	UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (SODIUM HYPOCHLORITE), 9, III, MARINE POLLUTANT

**ICAO**

<b>UN-No</b>	UN3082
<b>Proper Shipping Name</b>	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
<b>Hazard Class</b>	9
<b>Packing Group</b>	III
<b>Description</b>	UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (SODIUM HYPOCHLORITE), 9, III

**IATA**

UN-No UN3082  
 Proper Shipping Name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.  
 Hazard Class 9  
 Packing Group III  
 Description UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (SODIUM HYPOCHLORITE), 9, III

**IMDG/IMO**

UN-No UN3082  
 Proper Shipping Name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.  
 Hazard Class 9  
 Packing Group III  
 EmS No. F-A, S-F  
 Marine Pollutant Product is a marine pollutant according to the criteria set by IMDG/IMO  
 Description UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (SODIUM HYPOCHLORITE), 9, III, MARINE POLLUTANT

**REGULATORY INFORMATION**

**Chemical Inventories**

**TSCA** All components of this product are either on the TSCA 8(b) Inventory or otherwise exempt from listing.  
**DSL/NDSL** All components are on the DSL or NDSL.

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory  
 DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

**U.S. Federal Regulations**

**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

**SARA 311/312 Hazard Categories**

Acute Health Hazard Yes  
 Chronic Health Hazard No  
 Fire Hazard No  
 Sudden Release of Pressure Hazard No  
 Reactive Hazard No

**Clean Water Act**

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Sodium hypochlorite 7681-52-9	100 lb			X

**CERCLA**

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical Name	Hazardous Substances RQs	Extremely Hazardous Substances RQs	RQ
Sodium hypochlorite 7681-52-9	100 lb	-	RQ 100 lb final RQ RQ 45.4 kg final RQ

**EPA Statement**

This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label:

**DANGER: CORROSIVE.** Causes irreversible eye damage and skin burns. Harmful if swallowed. Do not get in eyes, on skin, or on clothing. Wear protective eyewear and rubber gloves when handling this product. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the restroom. Avoid breathing vapors and use only in a well-ventilated area.

**US State Regulations**

**California Proposition 65**

This product does not contain any Proposition 65 chemicals.

**U.S. State Right-to-Know Regulations**

Chemical Name	New Jersey	Massachusetts	Pennsylvania	Rhode Island	Illinois
Sodium hypochlorite 7681-52-9	X	X	X	X	
Sodium chlorate 7775-09-9	X	X	X		

**International Regulations**

**Canada**

**WHMIS Hazard Class**

E - Corrosive material



**10. OTHER INFORMATION**

<b>NFPA</b>	Health Hazard 3	Flammability 0	Instability 0	Physical and Chemical Hazards -
<b>HMS</b>	Health Hazard 3	Flammability 0	Physical Hazard 0	Personal Protection B

**Prepared By** Product Stewardship  
23 British American Blvd.  
Latham, NY 12110  
1-800-572-6501

**Revision Date** New

**Revision Note** New

**Reference** 1096036/164964.159

**General Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal, and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet



# Safety Data Sheet

## Spartan Chemical Company, Inc.

Revision Date: 11-Aug-2020

### 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Identifier**

**Product Name:** CLOTHESLINE FRESH LAUNDRY DETERGENT [3]  
**Product Number:** 7003  
**Recommended Use:** Laundry detergent  
**Uses Advised Against:** For Industrial and Institutional Use Only

**Manufacturer/Supplier:** Spartan Chemical Company, Inc.  
1110 Spartan Drive  
Maumee, Ohio 43537 USA  
800-537-8990 (Business hours)  
[www.spartanchemical.com](http://www.spartanchemical.com)

**24 Hour Emergency Phone Numbers:**

**Medical Emergency/Information:** 888-314-6171  
**Transportation/Spill/Leak:** CHEMTREC 800-424-9300

### 2. HAZARDS IDENTIFICATION

**GHS Classification**

Serious Eye Damage/Eye Irritation: Category 2B

**GHS Label Elements**

**Signal Word:**

**Warning**

**Symbols:**

No symbols

**Hazard Statements:**

Causes eye irritation.

**Precautionary Statements:**

**Prevention:**

Wash hands and any exposed skin thoroughly after handling.

**Response:**

**-Eyes**

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention. See Safety Data Sheet Section 4: "FIRST AID MEASURES" for additional information.

**-Specific Treatment:**

**Storage:**

Not Applicable

**Disposal:**

Not Applicable

**Hazards Not Otherwise Classified:** Not Applicable

**Other Information:**

- May be harmful if swallowed.
- May cause skin irritation.
- Keep out of reach of children.

### 3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%
Water	7732-18-5	60-100
C9-11 Pareth-6	68439-46-3	7-13

C12-13 Pareth-5	66455-14-9	1-5
Acrylic Copolymer	PROPRIETARY	1-5
Caprylyl/Caryl Glucoside	68515-73-1	1-5
Sodium C10-18 Secondary Akyl Sulfphonate	68037-49-0	0.1-1
Lauryl Glucoside	110615-47-9	0.1-1
Potassium Alkanoate	PROPRIETARY	0.1-1
Benzyl Benzoate	120-51-4	0.1-1
Tetramethyl Acetyloctahydronaphthalenes	54464-57-2	<0.1
Acetyl Hexamethyl Tetralin	1506-02-1	<0.1
2,6-Dimethyl-7-Octen-2-ol	18479-58-8	<0.1
Orange Terpenes	68647-72-3	<0.1
Verdyl Acetate	5413-60-5	<0.1
Butylphenyl Methylpropional	80-54-6	<0.1
Methyl Alpha-Ionone Isomers	1335-46-2	<0.1
2,4-Dimethyl-3-Cyclohexene Carboxaldehyde	68039-49-6	<0.1
Blue Colorant	PROPRIETARY	<0.1
Fragrance	PROPRIETARY	<0.1
Methylchloroisothiazolinone	26172-55-4	<0.1
Methylisothiazolinone	2682-20-4	<0.1

Specific chemical identity and/or exact percentage of composition has been withheld as a trade secret.

#### 4. FIRST AID MEASURES

- Eye Contact:** Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.
- Skin Contact:** Wash with soap and water. If skin irritation occurs: Get medical attention.
- Inhalation:** Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a poison control center or physician if you feel unwell.
- Ingestion:** Rinse mouth. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention if you feel unwell.
- Note to Physicians:** Treat symptomatically.

#### 5. FIRE-FIGHTING MEASURES

- Suitable Extinguishing Media:** Product does not support combustion, Use extinguishing agent suitable for type of surrounding fire
- Specific Hazards Arising from the Chemical:** Dried product is capable of burning. Combustion products are toxic.
- Hazardous Combustion Products:** May include Carbon monoxide Carbon dioxide and other toxic gases or vapors.
- Protective Equipment and Precautions for Firefighters:** Wear MSHA/NIOSH approved self-contained breathing apparatus (SCBA) and full protective gear. Cool fire-exposed containers with water spray.

#### 6. ACCIDENTAL RELEASE MEASURES

- Personal Precautions:** Avoid contact with skin, eyes or clothing. Use personal protective equipment as required.
- Environmental Precautions:** Do not rinse spill onto the ground, into storm sewers or bodies of water.
- Methods for Clean-Up:** Use personal protective equipment as required. Dam up. Cover liquid spill with sand, earth or other non-combustible absorbent material. Take up mechanically, placing in appropriate containers for disposal. Clean contaminated surface thoroughly.

#### 7. HANDLING AND STORAGE

- Advice on Safe Handling:** Handle in accordance with good industrial hygiene and safety practice. Wash thoroughly



**Storage Conditions:** after handling.  
Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children. Keep from freezing.

**Suggested Shelf Life:** Minimum of 2 years from date of manufacture.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Occupational Exposure Limits:** None established

**Engineering Controls:** Provide good general ventilation.  
If work practices generate dust, fumes, gas, vapors or mists which expose workers to chemicals above the occupational exposure limits, local exhaust ventilation or other engineering controls should be considered.

**Personal Protective Equipment**

**Eye/Face Protection:** Not required with expected use.

**Skin and Body Protection:** Not required with expected use.

**Respiratory Protection:** Not required with expected use.  
If occupational exposure limits are exceeded or respiratory irritation occurs, use of a NIOSH/MSHA approved respirator suitable for the use-conditions and chemicals in Section 3 should be considered.

**General Hygiene Considerations:** Wash hands and any exposed skin thoroughly after handling.  
See 29 CFR 1910.132-138 for further guidance.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance/Physical State:</b>	Liquid
<b>Color:</b>	Blue
<b>Odor:</b>	Pleasant
<b>pH:</b>	8.0-9.0
<b>Melting Point / Freezing Point:</b>	No information available.
<b>Boiling Point / Boiling Range:</b>	100 °C / 212 °F
<b>Flash Point:</b>	> 100 °C / > 212 °F ASTM D56
<b>Evaporation Rate:</b>	< 1 (BuAc = 1)
<b>Flammability (solid, gas)</b>	No information available.
<b>Upper Flammability Limit:</b>	No information available.
<b>Lower Flammability Limit:</b>	No information available.
<b>Vapor Pressure:</b>	No information available.
<b>Vapor Density:</b>	No information available.
<b>Specific Gravity:</b>	1.01
<b>Solubility(ies):</b>	Soluble in water
<b>Partition Coefficient:</b>	No information available.
<b>Autoignition Temperature:</b>	No information available.
<b>Decomposition Temperature:</b>	No information available.
<b>Viscosity:</b>	No information available.

## 10. STABILITY AND REACTIVITY

**Reactivity:** This material is considered to be non-reactive under normal conditions of use.

**Chemical Stability:** Stable under normal conditions.

**Possibility of Hazardous Reactions:** Not expected to occur with normal handling and storage.

**Conditions to Avoid:** Extremes of temperature and direct sunlight.

**Incompatible Materials:** Strong oxidizing agents. Strong acids.

**Hazardous Decomposition Products:** May include carbon monoxide, carbon dioxide (CO<sub>2</sub>) and other toxic gases or vapors.

## 11. TOXICOLOGICAL INFORMATION

**Likely Routes of Exposure:** Eyes, Skin, Ingestion, Inhalation.

**Symptoms of Exposure:**

**-Eye Contact:** Pain, redness and swelling of the conjunctiva.  
**-Skin Contact:** Drying of the skin.  
**-Inhalation:** Nasal discomfort and coughing.  
**-Ingestion:** Pain, nausea, vomiting and diarrhea.

**Immediate, Delayed, Chronic Effects**

Product Information: Data not available or insufficient for classification.

**Numerical Measures of Toxicity**

The following acute toxicity estimates (ATE) are calculated based on the GHS document.

ATEmix (oral): 7037 mg/kg  
 ATEmix (dermal): 2938 mg/kg

**Component Acute Toxicity Information**

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Water 7732-18-5	> 90 mL/kg ( Rat )	Not Available	Not Available
C9-11 Pareth-6 68439-46-3	= 1400 mg/kg ( Rat )	Not Available	Not Available
C12-13 Pareth-5 66455-14-9	> 10 g/kg ( Rat )	Not Available	Not Available
Benzyl Benzoate 120-51-4	= 500 mg/kg ( Rat )	= 4000 mg/kg ( Rabbit )	Not Available
2,6-Dimethyl-7-Octen-2-ol 18479-58-8	= 3600 mg/kg ( Rat )	> 5 g/kg ( Rabbit )	Not Available
Butylphenyl Methylpropional 80-54-6	= 1390 mg/kg ( Rat )	> 5000 mg/kg ( Rabbit )	Not Available
Methyl Alpha-Ionone Isomers 1335-46-2	> 5 g/kg ( Rat )	> 5000 mg/kg ( Rabbit )	Not Available
Methylchloroisothiazolinone 26172-55-4	= 481 mg/kg ( Rat )	Not Available	= 1.23 mg/L ( Rat ) 4 h

**Carcinogenicity:** No components present at 0.1% or greater are listed as to being carcinogens by ACGIH, IARC, NTP or OSHA.

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity**

Chemical Name	Algae/Aquatic Plants	Fish	Toxicity to Microorganisms	Crustacea
Butylphenyl Methylpropional 80-54-6	Not Available	2.2 - 4.6: 96 h Brachydanio rerio mg/L LC50 static	Not Available	10.7: 48 h Daphnia magna mg/L EC50
Methylchloroisothiazolinone 26172-55-4	0.11 - 0.16: 72 h Pseudokirchneriella subcapitata mg/L EC50 static 0.03 - 0.13: 96 h Pseudokirchneriella subcapitata mg/L EC50 static	1.6: 96 h Oncorhynchus mykiss mg/L LC50 semi-static	Not Available	4.71: 48 h Daphnia magna mg/L EC50 0.12 - 0.3: 48 h Daphnia magna mg/L EC50 Flow through 0.71 - 0.99: 48 h Daphnia magna mg/L EC50 Static

**Persistence and Degradability:** No information available.

**Bioaccumulation:** No information available.

**Other Adverse Effects:** No information available.

## 13. DISPOSAL CONSIDERATIONS

**Disposal of Wastes:** Dispose of in accordance with federal, state and local regulations.

**Contaminated Packaging:** Dispose of in accordance with federal, state and local regulations.

## 14. TRANSPORT INFORMATION

**DOT:** Not Regulated  
**Proper Shipping Name:** Non Hazardous Product  
**Special Provisions:** Shipping descriptions may vary based on mode of transport, quantities, package size, and/or origin and destination. Check with a trained hazardous materials transportation expert for information specific to your situation.

**IMDG:** Not Regulated  
**Proper Shipping Name:** Non Hazardous Product

## 15. REGULATORY INFORMATION

**TSCA Status:** (Toxic Substance Control Act Section 8(b) Inventory)  
 All chemical substances in this product are included on or exempted from listing on the TSCA Inventory of Chemical Substances.

### **SARA 313**

This product does not contain listed substances above the "de minimus" level

### **SARA 311/312 Hazard Categories**

<b>Acute Health Hazard:</b>	Yes
<b>Chronic Health Hazard:</b>	No
<b>Fire Hazard:</b>	No
<b>Sudden release of pressure hazard:</b>	No
<b>Reactive Hazard:</b>	No

### **California Proposition 65**

This product is not subject to warning requirements under California Proposition 65.

## 16. OTHER INFORMATION

<b>NFPA</b>	<b>Health Hazards: 1</b>	<b>Flammability: 0</b>	<b>Instability: 0</b>	<b>Special: N/A</b>
<b>HMIS</b>	<b>Health Hazards: 1</b>	<b>Flammability: 0</b>	<b>Physical Hazards: 0</b>	

**Revision Date:** 11-Aug-2020  
**Reasons for Revision:** Section 3 and 11

### **Disclaimer:**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**End of Safety Data Sheet**

## Section 1 Chemical Product and Company Information

Page E1 of E2

# ward's science

5100 West Henrietta Rd  
PO Box 92912  
Rochester, NY 14692-9012  
Tel: (800) 962-2660

**CHEMTREC 24 Hour Emergency**  
**Phone Number (800) 424-9300**  
For laboratory use only.  
Not for drug, food or household use.

Product	COBALT
Synonyms	Cobalt Metal Pieces

## Section 2 Hazard Identification

Signal word: DANGER  
Pictograms: GHS08  
Target organs: Lungs



**GHS Classification:**  
Skin sensitization (Category 1)  
Respiratory sensitization (Category 1)  
Aquatic chronic (Category 4)

**GHS Label information: Hazard statement:**  
H317: May cause an allergic skin reaction.  
H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
H413: May cause long lasting harmful effects to aquatic life.

**Precautionary statement:**  
P261: Avoid breathing dust.  
P272: Contaminated work clothing should not be allowed out of the workplace.  
P273: Avoid release to the environment.  
P280: Wear protective gloves/protective clothing/eye protection/face protection.  
P284: In case of inadequate ventilation, wear respiratory protection.  
P302+P352: IF ON SKIN: Wash with plenty of water and soap.  
P333+P313: If skin irritation or rash occurs: Get medical attention.  
P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
P342+P311: If experiencing respiratory symptoms: Call a POISON CENTER or doctor.  
P362+P364: Take off contaminated clothing and wash it before reuse.  
P501: Dispose of contents/container to a licensed chemical disposal agency in accordance with local/regional/national regulations.

Ca Prop 65 - WARNING! This product contains a chemical known to the State of California to cause cancer, birth defects, or other reproductive harm.

## Section 3 Composition, Information on Ingredients

Chemical Name	CAS #	%	EINECS
Cobalt metal	7440-48-4	100%	231-158-0

**INGESTION:** MAY BE HARMFUL IF SWALLOWED. Call physician or Poison Control Center immediately. Induce vomiting only if advised by appropriate medical personnel. Never give anything by mouth to an unconscious person.

**INHALATION:** MAY BE HARMFUL IF INHALED. MAY CAUSE RESPIRATORY TRACT IRRITATION. Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

**EYE CONTACT:** MAY CAUSE EYE IRRITATION. Check for and remove contact lenses. Flush thoroughly with water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get immediate medical attention.

**SKIN ABSORPTION:** MAY BE HARMFUL IF ABSORBED THROUGH SKIN. MAY CAUSE SKIN IRRITATION. Remove contaminated clothing. Flush thoroughly with mild soap and water. If irritation occurs, get medical attention.

**Suitable Extinguishing Media:** Sand, dry chemical, or CO<sub>2</sub> should be used on surrounding fire. Do NOT use water on fire where molten metal is present.

**Protective Actions for Fire-fighters:** In fire conditions, wear a NIOSH/MSHA-approved self-contained breathing apparatus and full protective gear. Use water spray to keep fire-exposed containers cool.

**Specific Hazards:** During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Molten metals produce fume, vapor and/or dust that may be toxic and/or a respiratory irritant. Metal reacts with oxidizing agents. Fine powder forms flammable and explosive mixtures in air. Material in powder form capable of creating a dust explosion.

## Section 4 Personal Precautions

**Personal Precautions:** Evacuate personnel to safe area. Use proper personal protective equipment as indicated in Section 8. Provide adequate ventilation.

**Environmental Precautions:** Avoid runoff into storm sewers and ditches which lead to waterways.

**Containment and Cleanup:** Recover for reuse if not contaminated. Remove all sources of ignition. Sweep or vacuum up and place in a suitable container for proper disposal. Wash spill area with soap and water.

**Precautions for Safe Handling:** Read label on container before using. Do not wear contact lenses when working with chemicals. Keep out of reach of children. Avoid contact with eyes, skin and clothing. Do not inhale dusts. Use with adequate ventilation. Avoid ingestion. Wash thoroughly after handling. Remove and wash clothing before reuse.

**Conditions for Safe Storage:** Store in a cool, dry, well-ventilated area away from incompatible substances. Keep away from ignition sources.

## Section 8 Exposure Controls / Personal Protection

Exposure Limits:	Chemical Name	ACGIH (TLV)	OSHA (PEL)	NIOSH (REL)
	Cobalt, alloys	Not established	Not established	Not established

**Engineering controls:** Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower and fire extinguishing material. Personnel should wear safety glasses, goggles, or faceshield, lab coat or apron, appropriate protective gloves. Use adequate ventilation to keep airborne concentrations low.

**Respiratory protection:** None should be needed in normal laboratory handling at room temperatures. If dusty conditions prevail, work in fume hood or wear a NIOSH/MSHA-approved respirator.

## Section 9 Physical &amp; Chemical Properties

<b>Appearance:</b> Solid. Gray, magnetic pieces	<b>Evaporation rate ( = 1):</b> Data not available	<b>Partition coefficient:</b> Data not available
<b>Odor:</b> No odor	<b>Flammability (solid/gas):</b> Data not available	<b>Auto-ignition temperature:</b> >200°C (392°F)
<b>Odor threshold:</b> Data not available	<b>Explosion limits: Lower / Upper:</b> Data not available	<b>Decomposition temperature:</b> Data not available
<b>pH:</b> Data not available	<b>Vapor pressure (mm Hg):</b> Negligible	<b>Viscosity:</b> Data not available
<b>Melting / Freezing point:</b> 1493°C (2720°F)	<b>Vapor density (Air = 1):</b> Data not available	<b>Molecular formula:</b> Co
<b>Boiling point:</b> 2723°C (3550°F)	<b>Relative density (Specific gravity):</b> 8.9 g/cc	<b>Molecular weight:</b> 58.93
<b>Flash point:</b> Data not available	<b>Solubility(ies):</b> Insoluble in water	

## Section 10 Stability &amp; Reactivity

**Chemical stability:** Stable  
**Conditions to avoid:** Excessive temperatures.  
**Incompatible materials:** Strong oxidizers, strong acids, acetylene, hydrazinium nitrate, ammonium nitrate, bromine pentafluoride.  
**Hazardous decomposition products:** Metallic oxides.

**Hazardous polymerization:** Will not occur.

## Section 11 Toxicological Information

**Acute toxicity:** Oral-rat LD50: >7000 mg/kg ; Inhalation-rat LC50: >10 mg/L/1 hour  
**Skin corrosion/irritation:** Data not available  
**Serious eye damage/irritation:** Data not available  
**Respiratory or skin sensitization:** Data not available  
**Germ cell mutagenicity:** Data not available  
**Carcinogenicity:** Data not available  
 NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.  
 IARC classified: Group 2B: Possibly carcinogenic to humans.  
 OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.  
**Reproductive toxicity:** Data not available  
**STOT-single exposure:** Data not available  
**STOT-repeated exposure:** Data not available  
**Aspiration hazard:** Data not available  
**Potential health effects:**  
 Inhalation: Inhalation may cause cough, shortness of breath, sore throat, wheezing. Repeated or prolonged inhalation may cause asthma.  
 Ingestion: Ingestion may cause abdominal pain, vomiting.  
 Skin: Repeated or prolonged contact may cause skin sensitization.  
 Eyes: Contact with eyes causes redness.  
**Signs and symptoms of exposure:** Exercise appropriate procedures to minimize potential hazards.  
**Additional information:** RTECS #: GF8750000


## Section 12 Ecological Information

**Toxicity to fish:** Brachydanio rerio (fish, fresh water), LC50 = >100 mg/L/96 hours  
**Toxicity to daphnia and other aquatic invertebrates:** Daphnia magna (Crustacea), NOEC = 3.2 mg/L/48 hours  
**Toxicity to algae:** Selenastrum capricornutum (Algae), NOEC = 0.01 - 0.015 mg/L/72 hours  
**Persistence and degradability:** No data available  
**Bioaccumulative potential:** No data available  
**Mobility in soil:** No data available  
**PBT and vPvB assessment:** No data available  
**Other adverse effects:** An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

These disposal guidelines are intended for the disposal of catalog-size quantities only. Federal regulations may apply to empty container. State and/or local regulations may be different. Dispose of in accordance with all local, state and federal regulations or contract with a licensed chemical disposal agency.

**UN/NA number:** Not applicable  
**Hazard class:** Not applicable  
**Exceptions:** Not applicable  
**Shipping name:** Not Regulated  
**Packing group:** Not applicable  
**2012 ERG Guide #** Not applicable  
**Reportable Quantity:** No  
**Marine pollutant:** No

A chemical is considered to be listed if the CAS number for the anhydrous form is on the Inventory list.

Component	TSCA	CERCLA (RQ)	RCRA code	DSL	NDSL	WHMIS Classification
Cobalt	Listed	Not listed	D001	Listed	Not listed	 D2A; D2B

## Section 13 Other Information

The information contained herein is furnished without warranty of any kind. Employers should use this information only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees. NTP: National Toxicology Program, IARC: International Agency for Research on Cancer, OSHA: Occupational Safety and Health Administration, STOT: Specific Target Organ Toxicity, SE: Single Exposure, RE: Repeated Exposure, ERG: Emergency Response Guidebook.



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CHEMTREC 24 Hour Emergency  
 Phone Number (800) 424-9300  
 For laboratory use only.  
 Not for drug, food or household use.

Product	COBALT(II) CHLORIDE, HEXAHYDRATE
Synonyms	Cobaltous Chloride, Hexahydrate / Cobalt Dichloride, Hexahydrate

Signal word: DANGER  
 Pictograms: GHS05 / GHS07 / GHS08 / GHS09  
 Target organs: Eyes, Skin, Respiratory system, Gastrointestinal tract, Liver, Kidneys, Blood, Heart, Reproductive system



GHS Classification:  
 Acute toxicity, oral (Category 4)  
 Skin corrosion (Category 1A)  
 Serious eye damage (Category 1)  
 Skin sensitization (Category 1)  
 Respiratory sensitization (Category 1)  
 Mutagenicity (Category 2)  
 Carcinogenicity (Category 1B)  
 Reproductive toxicity (Category 1B)  
 Aquatic acute (Category 1)  
 Aquatic chronic (Category 1)

GHS Label Information: Hazard statement:  
 H302: Harmful if swallowed.  
 H314: Causes severe skin burns and eye damage.  
 H317: May cause an allergic skin reaction.  
 H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
 H341: Suspected of causing genetic defects.  
 H350: May cause cancer.  
 H360: May damage fertility or the unborn child.  
 H410: Very toxic to aquatic life with long lasting effects.

Precautionary statement:  
 P201: Obtain special instructions before use.  
 P202: Do not handle until all safety precautions have been read and understood.  
 P280: Do not breathe dust.  
 P264: Wash hands thoroughly after handling.  
 P270: Do not eat, drink or smoke when using this product.  
 P272: Contaminated work clothing should not be allowed out of the workplace.  
 P273: Avoid release to the environment.  
 P280: Wear protective gloves/protective clothing/eye protection/face protection.  
 P284: Wear respiratory protection.  
 P301+P330+ P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.  
 P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
 P303+P361+P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.  
 P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
 P308+P313: IF exposed or concerned: Get medical attention.  
 P363: Wash contaminated clothing before reuse.  
 P391: Collect spillage.  
 P405: Store locked up.  
 P501: Dispose of contents/container to a licensed chemical disposal agency in accordance with local/regional/national regulations.

Ca Prop 65 - This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm.

Chemical Name	CAS #	%	HMPS
Cobalt chloride, hexahydrate	7791-13-1	100%	231-589-4

**INGESTION: HARMFUL IF SWALLOWED.** Call physician or Poison Control Center immediately. Induce vomiting only if advised by appropriate medical personnel. Never give anything by mouth to an unconscious person.

**INHALATION: HARMFUL IF INHALED. CAUSES RESPIRATORY TRACT IRRITATION.** Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

**EYE CONTACT: CAUSES EYE IRRITATION.** Check for and remove contact lenses. Flush thoroughly with water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get immediate medical attention.

**SKIN ABSORPTION: MAY BE HARMFUL IF ABSORBED THROUGH SKIN. CAUSES SKIN IRRITATION.** Remove contaminated clothing. Flush thoroughly with mild soap and water. If irritation occurs, get medical attention.

**Suitable Extinguishing Media:** Use any media suitable for extinguishing supporting fire.

**Protective Actions for Fire-fighters:** In fire conditions, wear a NIOSH/MSHA-approved self-contained breathing apparatus and full protective gear. Use water spray to keep fire-exposed containers cool.

**Specific Hazards:** During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

**Personal Precautions:** Evacuate personnel to safe area. Use proper personal protective equipment as indicated in Section 8. Provide adequate ventilation.

**Environmental Precautions:** Avoid runoff into storm sewers and ditches which lead to waterways.

**Containment and Cleanup:** Recover for reuse if not contaminated. Sweep or vacuum up and place in a suitable container for proper disposal. Wash spill area with soap and water.

**SB01170 COBALT CHLORIDE HEXAHYDRATE 100G**

**Precautions for Safe Handling:** Read label on container before using. Do not wear contact lenses when working with chemicals. Keep out of reach of children. Avoid contact with eyes, skin and clothing. Do not inhale dusts. Use with adequate ventilation. Avoid ingestion. Wash thoroughly after handling. Remove and wash clothing before reuse.

**Conditions for Safe Storage:** Store in a cool, dry, well-ventilated area away from incompatible substances.

Exposure Limits:	Chemical Name	ACGIH (TLV)	OSHA (PEL)	NIOSH (REL)
	Cobalt and inorganic compounds, as Co	TWA: 0.02 mg/m <sup>3</sup> (A3)	TWA: 0.1 mg/m <sup>3</sup> for metal dust & fume	TWA: 0.05 mg/m <sup>3</sup> for metal dust & fume

**Engineering controls:** Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower and fire extinguishing material. Personnel should wear safety glasses, goggles, or faceshield, lab coat or apron, appropriate protective gloves. Use adequate ventilation to keep airborne concentrations low.

**Respiratory protection:** None should be needed in normal laboratory handling at room temperatures. If dusty conditions prevail, work in fume hood or wear a NIOSH/MSHA-approved respirator.

<b>Appearance:</b> Solid, damp, red crystals. <b>Odor:</b> Hydrochloric acid odor. <b>Odor threshold:</b> Data not available. <b>pH:</b> Data not available. <b>Melting / Freezing point:</b> Data not available <b>Boiling point:</b> Data not available <b>Fresh point:</b> Data not available	<b>Evaporation rate ( = 1):</b> Data not available <b>Flammability (solid/gas):</b> Data not available. <b>Explosion limits: Lower / Upper:</b> Data not available <b>Vapor pressure (mm Hg):</b> Data not available <b>Vapor density (Air = 1):</b> Data not available <b>Relative density (Specific gravity):</b> 1.92 <b>Solubility(ies):</b> Soluble in water.	<b>Partition coefficient:</b> Data not available <b>Auto-ignition temperature:</b> Data not available <b>Decomposition temperature:</b> 490°C <b>Viscosity:</b> Data not available. <b>Molecular formula:</b> CoCl <sub>2</sub> ·6H <sub>2</sub> O <b>Molecular weight:</b> 237.93
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**Chemical stability:** Stable **Hazardous polymerization:** Will not occur.  
**Conditions to avoid:** Excessive temperatures, moisture. Material is hygroscopic.  
**Incompatible materials:** Strong oxidizers. Corrosive to aluminum when wet.  
**Hazardous decomposition products:** Sublimes at 500°C into HCl gas. Thermal decomposition may produce chlorine.

**Acute toxicity:** Oral-rat LD50: 788 mg/kg ; Dermal-rat LD50: >2,000 mg/kg  
**Skin corrosion/irritation:** Data not available  
**Serious eye damage/irritation:** Data not available  
**Respiratory or skin sensitization:** Data not available  
**Germ cell mutagenicity:** Data not available  
**Carcinogenicity:** Data not available  
**NTP:** No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.  
**IARC classified:** Group 2B: Possibly carcinogenic to humans.  
**OSHA:** No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.  
**Reproductive toxicity:** Data not available  
**STOT-single exposure:** Data not available  
**STOT-repeated exposure:** Data not available  
**Aspiration hazard:** Data not available  
**Potential health effects:**  
**Inhalation:** Prolonged or repeated inhalation may cause respiratory sensitization. May cause lung damage.  
**Ingestion:** May cause vomiting, diarrhea and a sensation of heatness.  
**Skin:** Prolonged or repeated exposure causes irritation and may result in an allergic skin reaction.  
**Eyes:** Causes irritation and/or burns.  
**Signs and symptoms of exposure:** Exercise appropriate procedures to minimize potential hazards.  
**Additional information:** RTECS #: GG0200000

**Toxicity to fish:** LC50 - Cyprinus carpio (Carp) - 0.33 mg/l - 96.0 h  
**Toxicity to daphnia and other aquatic invertebrates:** EC50 - Daphnia magna (Water flea) - 1.1 - 1.6 mg/l - 48 h  
**Toxicity to algae:** EC50 - Chlorella vulgaris (Fresh water algae) - 0.5 mg/l - 96 h  
**Persistence and degradability:** No data available **Bioaccumulative potential:** No data available  
**Mobility in soil:** No data available **PBT and vPvB assessment:** No data available  
**Other adverse effects:** An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

These disposal guidelines are intended for the disposal of catalog-size quantities only. Federal regulations may apply to empty container. State and/or local regulations may be different. Dispose of in accordance with all local, state and federal regulations or contract with a licensed chemical disposal agency.

**UN/NA number:** UN3260 **Shipping name:** Corrosive solid, acidic, inorganic, n.o.s., (Cobalt chloride)  
**Hazard class:** 8 **Packing group:** II **Reportable Quantity:** No **Marine pollutant:** No  
**Exceptions:** Limited quantity equal to or less than 1 Kg **2012 ERG Guide #** 154

A chemical is considered to be listed if the CAS number for the anhydrous form is on the inventory list.

Component	TSCA	CERCLA (RC)	RCRA code	DSL	NDSL	WHMIS Classification
Cobalt chloride	Listed	Not listed	Not listed	Listed	Not listed	D2A; D2B

## Section 1 Chemical Product and Company Information

Page E1 of E2



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**CHEMTREC 24 Hour Emergency**  
**Phone Number (800) 424-9300**  
For laboratory use only.  
Not for drug, food or household use.

<b>Product</b>	<b>COBALT NITRATE, HEXAHYDRATE</b>
<b>Synonyms</b>	Cobalt(II) Nitrate, Hexahydrate ; Cobaltous Nitrate, Hexahydrate

## Section 2 Hazards Identification

**Signal word:** DANGER**Pictograms:** GHS03 / GHS05 / GHS07 / GHS08 / GHS09**Target organs:** Kidneys, Lungs, Thyroid**GHS Classification:**

Oxidizing solid (Category 2)  
Acute toxicity, oral (Category 4)  
Skin sensitization (Category 1)  
Eye damage (Category 1)  
Mutagenicity (Category 2)  
Carcinogenicity (Category 1B)  
Reproductive toxicity (Category 1B)  
Aquatic acute (Category 1)  
Aquatic chronic (Category 1)

**GHS Label information: Hazard statement:**

H272: May intensify fire; oxidizer.  
H302: Harmful if swallowed.  
H317: May cause an allergic skin reaction.  
H318: Causes serious eye damage.  
H341: Suspected of causing genetic defects.  
H350: May cause cancer.  
H360: May damage fertility or the unborn child.  
H400: Very toxic to aquatic life.  
H410: Very toxic to aquatic life with long lasting effects.

**Precautionary statement:**

P201: Obtain special instructions before use.  
P202: Do not handle until all safety precautions have been read and understood.  
P210: Keep away from heat/sparks/open flames/hot surfaces. No smoking.  
P220: Keep away from clothing/incompatible/combustible materials.  
P221: Take any precaution to avoid mixing with combustibles/acids/oxidizers.  
P261: Avoid breathing dust.  
P264: Wash hands thoroughly after handling.  
P270: Do not eat, drink or smoke when using this product.  
P272: Contaminated work clothing should not be allowed out of the workplace.  
P273: Avoid release to the environment.  
P280: Wear protective gloves/protective clothing/eye protection/face protection.  
P301+P330+P312: IF SWALLOWED: Rinse mouth. Call a POISON CENTER or doctor if you feel unwell.  
P302+P352: IF ON SKIN: Wash with plenty of water and soap.  
P333+P313: If skin irritation or rash occurs: Get medical attention.  
P308+P313: IF exposed or concerned: Get medical attention.  
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P310: Immediately call a POISON CENTER or doctor.  
P362+P364: Take off contaminated clothing and wash it before reuse.  
P370+P378: In case of fire: Use dry chemical, alcohol foam, carbon dioxide or water spray to extinguish.  
P391: Collect spillage.  
P405: Store locked up.  
P501: Dispose of contents/container to a licensed chemical disposal agency in accordance with local/regional/national regulations.

Ca Prop 65 - This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm.

## Section 3 Composition / Information on Ingredients

Chemical Name	CAS #	%	EINECS
Cobalt nitrate	10026-22-9	100%	233-402-1 (anhydrous)

## Section 4 First Aid Measures

**INGESTION:** HARMFUL IF SWALLOWED. Call physician or Poison Control Center immediately. Induce vomiting only if advised by appropriate medical personnel. Never give anything by mouth to an unconscious person.

**INHALATION:** HARMFUL IF INHALED. CAUSES RESPIRATORY TRACT IRRITATION. Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

**EYE CONTACT:** CAUSES EYE IRRITATION. Check for and remove contact lenses. Flush thoroughly with water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get immediate medical attention.

**SKIN ABSORPTION:** MAY BE HARMFUL IF ABSORBED THROUGH SKIN. CAUSES SKIN IRRITATION. Remove contaminated clothing. Flush thoroughly with mild soap and water. If irritation occurs, get medical attention.

## Section 5 Fire Fighting Measures

**Suitable Extinguishing Media:** Use any media suitable for extinguishing supporting fire.

**Protective Actions for Fire-fighters:** In fire conditions, wear a NIOSH/MSHA-approved self-contained breathing apparatus and full protective gear. Use water spray to keep fire-exposed containers cool.

**Specific Hazards:** During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. In contact with easily oxidizable substances it may react rapidly enough to cause ignition, violent combustion or explosion.

## Section 6 Accidental Release Measures

**Personal Precautions:** Evacuate personnel to safe area. Use proper personal protective equipment as indicated in Section 8. Provide adequate ventilation.

**Environmental Precautions:** Avoid runoff into storm sewers and ditches which lead to waterways.

**Containment and Cleanup:** Remove all sources of ignition. Sweep or vacuum up and place in a suitable container for proper disposal. Wash spill area with soap and water.



**Section 7 Handling & Storage**

**Precautions for Safe Handling:** Read label on container before using. Do not wear contact lenses when working with chemicals. Keep out of reach of children. Avoid contact with eyes, skin and clothing. Do not inhale dusts. Use with adequate ventilation. Avoid ingestion. Wash thoroughly after handling. Remove and wash clothing before reuse.

**Conditions for Safe Storage:** Store in a cool, dry, well-ventilated area away from incompatible substances. Keep away from ignition sources.

**Section 8 Exposure Controls / Personal Protection**

Exposure Limits:	Chemical Name	ACGIH (TLV)	OSHA (PEL)	NIOSH (REL)
	Cobalt and inorganic compounds, as Co	TWA: 0.02 mg/m <sup>3</sup> (A3)	TWA: 0.1 mg/m <sup>3</sup> metal dust and fume	TWA: 0.05 mg/m <sup>3</sup> metal dust and fume

**Engineering controls:** Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower and fire extinguishing material. Personnel should wear safety glasses, goggles, or faceshield, lab coat or apron, appropriate protective gloves. Use adequate ventilation to keep airborne concentrations low.

**Respiratory protection:** None should be needed in normal laboratory handling at room temperatures. If dusty conditions prevail, work in fume hood or wear a NIOSH/MSHA-approved respirator.

**Section 9 Physical & Chemical Properties**

**Appearance:** Solid. Small red flakes  
**Odor:** Slight nitric acid odor.  
**Odor threshold:** Data not available.  
**pH:** Data not available.  
**Melting / Freezing point:** 55°C (131°F)  
**Boiling point:** Data not available  
**Flash point:** Data not available

**Evaporation rate (Butyl acetate = 1):** Data not available  
**Flammability (solid/gas):** Data not available.  
**Explosion limits: Lower / Upper:** Data not available  
**Vapor pressure (mm Hg):** Data not available  
**Vapor density (Air = 1):** Data not available  
**Relative density (Specific gravity):** 1.88  
**Solubility(ies):** Soluble in water.

**Partition coefficient:** Data not available  
**Auto-ignition temperature:** Data not available  
**Decomposition temperature:** Data not available.  
**Viscosity:** Data not available.  
**Molecular formula:** Co(NO<sub>3</sub>)<sub>2</sub>·6H<sub>2</sub>O  
**Molecular weight:** 291.03

**Section 10 Stability & Reactivity**

**Chemical stability:** Stable

**Hazardous polymerization:** Will not occur.

**Conditions to avoid:** Excessive temperatures, heat, sparks, open flame and other sources of ignition. Moisture.

**Incompatible materials:** Oxidizers.

**Hazardous decomposition products:** Nitrogen oxides.

**Section 11 Toxicological Information**

**Acute toxicity:** Oral-rat LD50: 691 mg/kg

**Skin corrosion/irritation:** Data not available

**Serious eye damage/irritation:** Data not available

**Respiratory or skin sensitization:** Data not available

**Germ cell mutagenicity:** Data not available

**Carcinogenicity:** Data not available

**NTP:** No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

**IARC classified:** Group 2B: Possibly carcinogenic to humans.

**OSHA:** No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**Reproductive toxicity:** Data not available

**STOT-single exposure:** Data not available

**STOT-repeated exposure:** Data not available

**Aspiration hazard:** Data not available

**Potential health effects:**

Inhalation: Harmful if inhaled.

Ingestion: Harmful if ingested.

Skin: Contact causes irritation or acid burns.

Eyes: Contact causes irritation or acid burns.

**Signs and symptoms of exposure:** The substance is irritating to skin, eyes and respiratory tract. Repeated or prolonged inhalation may cause asthma. This substance is possibly carcinogenic to humans. Exercise appropriate procedures to minimize potential hazards.

**Additional information:** RTECS #: QU7355500

**Section 12 Ecological Information**

**Toxicity to fish:** LC50 (Fresh water) = 1.5 µg/L

**Toxicity to daphnia and other aquatic invertebrates:** LC50 (Fresh water) = 0.61 mg/L

**Toxicity to algae:** LC50 (Fresh water) = 144 µg/L

**Persistence and degradability:** No data available

**Bioaccumulative potential:** No data available

**Mobility in soil:** No data available

**PBT and vPvB assessment:** No data available

**Other adverse effects:** An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

**Section 13 Disposal Considerations**

These disposal guidelines are intended for the disposal of catalog-size quantities only. Federal regulations may apply to empty container. State and/or local regulations may be different. Dispose of in accordance with all local, state and federal regulations or contract with a licensed chemical disposal agency.

**Section 14 Transport Information (US DOT / CANADA TDG)**

**UN/NA number:** UN3085

**Shipping name:** Oxidizing solid, corrosive, n.o.s., (Cobalt dintrate)

**Hazard class:** 5.1, (8)

**Packing group:** III

**Reportable Quantity:** No

**Marine pollutant:** No

**Exceptions:** Limited quantity equal to or less than 5 Kg

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**Section 15 Regulatory Information**

A chemical is considered to be listed if the CAS number for the anhydrous form is on the Inventory list.

Component	TSCA	CERCLA (RQ)	RCRA code	DSL	NDSL	WHMIS Classification
Cobaltous nitrate hexhydrate	Listed	Not listed	D001	Not listed	Not listed	C ; D2A ; D2B

**Section 16 Additional Information**

The information contained herein is furnished without warranty of any kind. Employers should use this information only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees. NTP: National Toxicology Program, IARC: International Agency for Research on Cancer, OSHA: Occupational Safety and Health Administration, STOT: Specific Target Organ Toxicity, SE: Single Exposure, RE: Repeated Exposure, ERG: Emergency Response Guidebook.

# SAFETY DATA SHEET

11/17/2015

## SECTION I - IDENTIFICATION

### Material Name

COLORATIONS LIQUID WATERCOLOR

### Company Information

Discount School Supply/Excelligence Learning Corporation  
1112 Ravenwood Drive  
Bethlehem, GA 30620  
Phone: 1-770-307-1077  
Fax: 1-770-307-4907  
Email: acraig@excelligence.com

For transportation emergencies only call: 1-800-627-2829

For health emergencies call the Poison Control Center: 1-800-222-1222

## SECTION II - HAZARDS IDENTIFICATION

**Classification in accordance with paragraph (d) of 29 CFR 1910.1200.**

There are no GHS label elements.

PRIMARY ROUTES OF ENTRY: INHALATION, INGESTION, EYE, SKIN

EFFECTS AND SYMPTOMS OF ACUTE EXPOSURE: NONE EXPECTED

EFFECTS AND SYMPTOMS OF CHRONIC EXPOSURE: NONE EXPECTED

CARCINOGEN LISTING: NTP: **NO** IARC: **NO** OSHA: **NO**

SEE SECTION III FOR COMPONENTS AFFECTED

MEDICAL CONDITIONS USUALLY AGGRAVATED BY OVER EXPOSURE TO THIS PRODUCT: NONE

## SECTION III - COMPOSITION / INFORMATION ON HAZARDOUS INGREDIENTS

<u>Hazardous Ingredients</u>	<u>CAS/EC #</u>	<u>PEL/TLV (MG/M#)</u>	<u>Max % Weight</u>	<u>NTP</u>	<u>IARC</u>
None					

## SECTION IV - FIRST AID MEASURES

FIRST AID MEASURES: NONE REQUIRED. NO ACUTE HEALTH EFFECTS EXPECTED.

## **SECTION V - FIRE FIGHTING MEASURES**

FLASH POINT (METHOD): N/A  
EXPLOSION LIMITS IN AIR (% BY VOLUME): NOT EXPLOSIVE  
EXTINGUISHING MEDIA: NO SPECIAL MEDIA REQUIRED  
FIRE FIGHTING PROCEDURES: NO SPECIAL FIRE FIGHTING PROCEDURES REQUIRED  
UNUSUAL FIRE & EXPLOSION HAZARDS: NOT COMBUSTIBLE  
AUTOIGNITION TEMPERATURE: N/A

## **SECTION VI - ACCIDENTAL RELEASE MEASURES**

STEPS TO BE TAKEN IN CASE A MATERIAL IS SPILLED: Clean up in accordance with all applicable regulations. Absorb spillage with non-combustible, absorbent material. For waste disposal, see Section XIII

## **SECTION VII - HANDLING AND STORAGE**

PRECAUTIONS TO BE TAKEN DURING STORAGE AND HANDLING: Good industrial hygiene practice requires that exposure be maintained below the TLV. This is preferably achieved through the provision of adequate ventilation. When exposure cannot be adequately controlled in this way, personal respiratory protection should be employed.

## **SECTION VIII - EXPOSURE CONTROLS / PERSONAL PROTECTION**

RESPIRATORY PROTECTION AND SPECIAL VENTILATION REQUIREMENTS: NONE REQUIRED  
OTHER PROTECTIVE EQUIPMENT (GLOVES, GOGGLES, ETC): NONE REQUIRED  
WORK/HYGIENE PRACTICES: NONE REQUIRED  
ENGINEERING CONTROLS: NONE REQUIRED

## **SECTION IX - PHYSICAL AND CHEMICAL PROPERTIES**

BOILING POINT: N/A  
VAPOR PRESSURE: N/A  
SPECIFIC VAPOR DENSITY (AIR=1): N/A  
SOLUBILITY IN WATER: N/A  
MELTING POINT: N/A  
SPECIFIC GRAVITY: N/A  
REACTIVITY IN WATER: NON-REACTIVE

## **SECTION X - STABILITY AND REACTIVITY**

HAZARDOUS POLYMERIZATION PRODUCTS: N/A  
STABILITY: STABLE CONDITIONS TO AVOID: N/A  
INCOMPATIBILITY (MATERIALS TO AVOID): N/A  
HAZARDOUS DECOMPOSITION PRODUCTS: N/A

## **SECTION XI - TOXICOLOGICAL INFORMATION**

ACUTE EFFECTS ASSOCIATED WITH USE OF THIS MATERIAL: NONE EXPECTED  
The summated LD50 is 23681 mg/kg.  
The summated LC50 is 9337.5 mg/cubic meter.  
This product is not considered to be a known or suspected human carcinogen by NTP, IARC or OSHA (see section III)

## **SECTION XII - ECOLOGICAL INFORMATION**

NO HARMFUL EFFECTS KNOWN OTHER THAN THOSE ASSOCIATED WITH SUSPENDED INERT SOLIDS IN WATER.

## SECTION XIII - DISPOSAL CONSIDERATIONS

RCRA HAZARD CLASS (40 CFR 261): THIS PRODUCT IS NOT CLASSIFIED AS A HAZARDOUS WASTE.  
WASTE DISPOSAL METHOD: DISPOSE OF IN ACCORDANCE WITH FEDERAL, STATE AND LOCAL REGULATIONS.

## SECTION XIV - TRANSPORTATION INFORMATION

[U.S. DOT (49 CFR 172.101): THIS IS NOT A HAZARDOUS MATERIAL AS CLASSIFIED BY CFR 172.101.]

## SECTION XV - REGULATORY INFORMATION

CONTENTS OF THIS SDS COMPLY WITH OSHA HAZARD COMMUNICATION STANDARD 29 CFR 1910.1200  
EPA SARA TITLE III CHEMICAL LISTINGS  
NONE

SECTION 302.4 EXTREMELY HAZARDOUS SUBSTANCES (40 CFR 355):  
NONE

SECTION 313 TOXIC CHEMICALS (40 CFR 372):  
NONE

INTERNATIONAL REGULATIONS

CANADIAN WHMIS: THIS PRODUCT IS A CONTROLLED PRODUCT UNDER CANADA'S WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM. IT CONTAINS THE FOLLOWING TOXIC OR HIGHLY TOXIC MATERIALS:

MICA  
PROPYLENE GLYCOL

SUPPLEMENTAL STATE COMPLIANCE INFORMATION:

THIS PRODUCT CONTAINS THE FOLLOWING CHEMICAL(S) LISTED UNDER NEW JERSEY'S RIGHT TO KNOW PROGRAM:

MICA  
PIGMENT WHITE 6  
PROPYLENE GLYCOL

THIS PRODUCT CONTAINS THE FOLLOWING CHEMICAL(S) REQUIRING NOTIFICATION TO THE STATE OF WASHINGTON UNDER THEIR CHILDREN'S SAFE PRODUCTS ACT:

NONE

THIS PRODUCT CONTAINS THE FOLLOWING CHEMICAL(S) LISTED IN FLORIDA'S TOXIC SUBSTANCE LIST:

Mica dust

THIS PRODUCT CONTAINS THE FOLLOWING CHEMICAL(S) LISTED IN MAINE'S PRIORITY CHEMICAL LIST:

NONE

THIS PRODUCT CONTAINS THE FOLLOWING CHEMICALS CONSIDERED BY VERMONT AS BEING OF VERY HIGH CONCERN TO CHILDREN:

NONE

THIS PRODUCT CONTAINS THE FOLLOWING CHEMICAL(S) LISTED IN MASSACHUSETTS HAZARDOUS SUBSTANCE LIST:

Mica Dust  
Titanium dioxide

THIS PRODUCT CONTAINS THE FOLLOWING CHEMICAL(S) LISTED ON MICHIGAN'S CRITICAL MATERIALS REGISTER:

NONE

THIS PRODUCT CONTAINS THE FOLLOWING CHEMICAL(S) LISTED ON MINNESOTA'S HAZARDOUS SUBSTANCES LIST:

Propylene glycol  
Titanium dioxide

THIS PRODUCT CONTAINS THE FOLLOWING CHEMICAL(S) LISTED IN PENNSYLVANIA'S HAZARDOUS SUBSTANCES LIST:

1,2-Propanediol

Mica-group minerals

Titanium oxide

Under CPSC's consumer product regulations (16CFR1500.3 and 1500.14), this product has the following required acute and chronic hazard labeling:

**NONE**

## **SECTION XVI - OTHER INFORMATION**

Disclaimer: We believe the statements, technical information and recommendations contained herein are reliable, but they are given without warranty or guarantee of any kind. The information contained in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. It is the user's responsibility to satisfy oneself as to the suitability and completeness of this information for the user's own particular use.

**LAST REVISION DATE: 11/17/2015**

**Prepared by Duke OEM Toxicology**

## COLOR INFORMATION

THIS SDS APPLIES TO THE FOLLOWING COLORS WHICH ARE ASSOCIATED WITH HAZARDOUS AND/OR NON-HAZARDOUS INGREDIENTS

<b>Product Color</b>	<b>SKU</b>	<b>Hazardous Ingredient</b>
BLACK		(NONE)
BLUE		(NONE)
BROWN		(NONE)
FUSCHIA		(NONE)
GLITTER BLUE		(NONE)
GLITTER GREEN		(NONE)
GLITTER MAGENTA		(NONE)
GLITTER ORANGE		(NONE)
GLITTER RED		(NONE)
GLITTER TURQUOISE		(NONE)
GLITTER VIOLET		(NONE)
GLITTER YELLOW		(NONE)
GOLD		(NONE)
GRAY		(NONE)
GREEN		(NONE)
LIME		(NONE)
MAGENTA		(NONE)
ORANGE		(NONE)
PEACH		(NONE)
PINK		(NONE)
PURPLE		(NONE)
RED		(NONE)
SILVER		(NONE)
TANGERINE		(NONE)
TEAL		(NONE)
TURQUOISE		(NONE)
VIOLET		(NONE)
WHITE		(NONE)
YELLOW		(NONE)

## BRAND NAMES

THIS SDS APPLIES TO THE FOLLOWING BRAND NAMES

**Brand Name**

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COLORATIONS LIQUID WATERCOLOR

COLORATIONS GLITTER LIQUID WATERCOLOR

# SAFETY DATA SHEET

## SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

<b>PRODUCT NAME:</b>	COMET Powder Cleanser
<b>MANUFACTURER:</b>	Prestige Brands Inc. 90 North Broadway Irvington, NY 10533
<b>EMERGENCY PHONE:</b>	800-926-9441
<b>CHEMICAL NAME:</b>	Mixture
<b>PRODUCT USE:</b>	Household, Industrial and commercial powder cleanser

## SECTION 2: HAZARDS IDENTIFICATION

**EMERGENCY OVERVIEW:** A free flowing green powder with fragrance. May irritate the skin and eyes. Dusts may irritate respiratory tract.

### POTENTIAL HEALTH EFFECTS

<b>EYES:</b>	May irritate the eyes.
<b>SKIN:</b>	May irritate the skin.
<b>INGESTIONS:</b>	May cause irritation and stomach distress.
<b>INHALTION:</b>	May cause irritation to the respiratory tract.
<b>CHRONIC HAZARDS:</b>	Crystalline silica impurity when inhaled above safe exposure limits can cause respiratory system injury and potentially cancer.
<b>MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:</b>	Dermatitis

### CARCINOGENICITY

Ingredient Name	OSHA	ACGIH	NTP	IARC
Crystalline Silica	---	Suspect human carcinogen	Known carcinogen	Human carcinogen

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENT NAME	CAS NO.	%WT
Limestone	1317-65-3	80 - 90
Crystalline Silica, quartz (impurity)	14808-60-7	0.1 - 2
Sodium Carbonate	497-19-8	5 - 15
SodiumDodecylbenzene Sulfonate	25155-30-0	0.1 - 2
Dichloroisocyanuric Acid	87-90-1	0.1 - 2
Sodium Acetate	127-09-3	0.1 - 2
Calcium Hydroxide	1305-62-0	0.1 - 2
Sodium Alkyl Sulfate	151-21-3	0.1 - 2

## SECTION 4: FIRST AID MEASURES

<b>EYES:</b>	Wash with plenty of water for at least 15 minutes. If wearing contact lenses, remove first. If irritation persists, get medical attention.
<b>SKIN:</b>	Wash with plenty of water. If irritation persists, get medical attention.
<b>INGESTION:</b>	If conscious, drink several glasses of water. Do not induce vomiting. Consult a physician or poison control center.
<b>INHALTION:</b>	Remove victim to fresh air. Get medical attention if excessive inhalation occurs.

## SECTION 5: FIRE-FIGHTING MEASURES



## SAFETY DATA SHEET

<b>FLASH POINT:</b>	Not flammable
<b>FLASH POINT METHOD:</b>	Not applicable
<b>AUTOIGNITION TEMPERATURE:</b>	Not flammable
<b>EXTINGUISHING MEDIA:</b>	Use any standard agent appropriate for the surrounding fire.
<b>SPECIAL FIRE FIGHTING PROCEDURES:</b>	Wear self contained breathing apparatus.
<b>UNUSUAL FIRE AND EXPLOSION HAZARDS:</b>	None
<b>HAZARDOUS DECOMPOSITION PRODUCTS:</b>	Traces of sulfur oxides, carbon monoxide and carbon dioxide are potential thermal decomposition materials.

### SECTION 6: ACCIDENTAL RELEASE MEASURES

<b>ACCIDENTAL RELEASE MEASURES:</b>	Sweep and place into container for reuse or disposal.
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### SECTION 7: HANDLING AND STORAGE

<b>HANDLING AND STORAGE:</b>	Avoid Contact with eyes. Avoid breathing dust. Store in cool, dry ventilated area.
<b>OTHER PRECAUTIONS:</b>	None indicated

### SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

<b>ENGINEERING CONTROLS:</b>	Use local exhaust if dusty or misty conditions prevails.
<b>VENTILATION :</b>	Use local exhaust
<b>RESPIRATORY PROTECTION:</b>	A NIOSH approved dust or mist respirator should be worn in areas where product dusts or mists are present.
<b>EYE PROTECTION:</b>	Wear safety glasses or goggles, if needed for dusty conditions.
<b>SKIN PROTECTION:</b>	For sensitive skin or prolonged use, wear work gloves.
<b>OTHER PROTECTIVE CLOTHING OR EQUIPMENT:</b>	A source of running water in the work area is advisable for first aid purposes.

### EXPOSURE GUIDELINES:

Ingredient Name	OSHA	ACGIH
Limestone	15 mg/m <sup>3</sup> Total Dust (TWA) 5 mg/m <sup>3</sup> Respirable Dust (TWA)	None established
Crystalline Silica, quartz (impurity)	(10 mg/m <sup>3</sup> )/(%SiO <sub>2</sub> + 2) Respirable dust (TWA) 30 mg/m <sup>3</sup> /(%SiO <sub>2</sub> + 2) Total dust (TWA)	0.05 mg/m <sup>3</sup> Respirable dust (TWA)

### SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

<b>APPEARANCE:</b>	Green Powder
<b>ODOR:</b>	Odor
<b>PHYSICAL STATE:</b>	Powder
<b>pH (10% aq.):</b>	9..50 – 12.00
<b>BOILING POINT</b>	Not determined
<b>MELTING POINT:</b>	Not determined
<b>FREEZING POINT:</b>	Not determined
<b>VAPOR PRESSURE (mmHg):</b>	Negligible
<b>VAPOR DENSITY (AIR = 1):</b>	Not determined
<b>SPECIFIC GRAVITY (H<sub>2</sub>O = 1)</b>	1.30
<b>EVAPORATION RATE:</b>	Not determined
<b>VOLATILE ORGANIC COMPOUNDS</b>	0.0 – 0.5%

# SAFETY DATA SHEET

(VOC):	
VISCOSITY:	Not applicable (solid)
SOLUBILITY IN WATER:	Partially soluble
PERCENT SOLIDS BY WEIGHT:	99.00 - 99.51%
PERCENT VOLATILE:	Less than 0.5%

## SECTION 10: STABILITY AND REACTIVITY

STABILITY:	Stable under anticipated storage and use conditions.
CONDITIONS TO AVOID (STABILITY):	Do not mix with ammonia or other house chemicals as this releases toxic gases.
INCOMPATIBILITY (MATERIAL TO AVOID):	None anticipated
HAZARDOUS DECOMPOSITION OR BY-PRODUCTS:	None anticipated
HAZARDOUS POLYMERIZATION:	Will not occur

## SECTION 11: TOXICOLOGICAL INFORMATION

Acute	Product has not been tested as a mixture. Oral toxicity is estimated to be low.
Chronic	Crystalline silica impurity can cause decreased pulmonary function and/or lung cancer when inhaled above established safe limits over a prolonged period of time.

## SECTION 12: ECOLOGICAL INFORMATION

ECOLOGICAL INFORMATION:	Data not available.
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## SECTION 13: DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD:	Conform to state, federal and local regulations.
RCRA HAZARD CLASS:	Not a RCRA Hazardous waste if discarded.

The information listed in section 13 is for the product as shipped.

## SECTION 14: TRANSPORT INFORMATION

U.S. DOT HAZARD CLASS:	Not regulated in surface transportation
PROPER SHIPPING NAME:	COMET Powder Cleanser (non-hazardous goods)

## SECTION 15: REGULATORY INFORMATION

TOXIC SUBSTANCE CONTROL ACT (TSCA):	All ingredients are listed on the TSCA inventory.
SARA TITLE III (CERCLA):	No RQs or TPQs
311/312 HAZARD CATEGORIES:	Immediate, Delayed

Ingredient Name	RQ	TPQ	SARA 313 Reportable Ingredient
Sodium dodecylbenzene sulfonate	1000	None	No

CALIFORNIA PROPOSITION 65:	This product contains impurity known to the State of California to cause cancer (crystalline silica).
WHMIS CLASSIFICATION (CANADA):	Class D2A, D2B This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the MSDS

# SAFETY DATA SHEET

	contains all the information required by the Controlled Products Regulations.
<b>CANADIAN CHEMICAL INVENTORY</b>	Ingredients listed on Domestic Substances List (DSL) and Non Domestic Substance List (NDSL).

## SECTION 16: OTHER INFORMATION

<b>NFPA HAZARD CLASSIFICATION:</b>	<b>Health: 1</b>	<b>Flammability: 0</b>	<b>Instability: 0</b>	<b>Other: Not Applicable</b>
<b>HMIS HAZARD CLASSIFICATION:</b>	<b>Health: 1*</b>	<b>Flammability: 0</b>	<b>Physical Hazard: 0</b>	
<b>CURRENT ISSUE DATE:</b>	02/02/2010			
<b>PREVIOUS ISSUE DATE:</b>	01/11/2010			
<b>CHANGES FROM PREVIOUS ISSUE:</b>	Reformatted to ANSI Z129.1-2004 format and updated text throughout SDS			

**DISCLAIMER:** The information contained on this Safety Data Sheet is believed to be reliable and accurate, but is provided without warranty regarding its accuracy. Users must determine safe conditions for use and assume liability for any loss, injury, damage or expense resulting from use of this product.

# Safety Data Sheet

PURE LYE

SDS Revision Date:

07/01/2018



## 1. Identification

### 1.1. Product identifier

**Product Identity**

COMSTAR PURE LYE

**Alternate Names**

30-525, 30-528, 30-529 (Flakes) 30-500, 30-501, 30-502, 30-503 (Beads) Blended Formula, PURE LYE

### 1.2. Relevant identified uses of the substance or mixture and uses advised against

**Intended use**

See Technical Data Sheet.

**Application Method**

See Technical Data Sheet.

### 1.3. Details of the supplier of the safety data sheet

**Company Name**

ComStar International Inc.  
20-45 128th Street,  
College Point, NY 11356

**Telephone No.**

718-445-7900  
800-328-0142  
Fax: 718-353-5998

## 2. Hazard(s) identification

### 2.1. Classification of the substance or mixture

Skin Corr 1A; H314

Causes severe skin burns and eye damage.

Eye Dam. 1; H318

Causes serious eye damage.

### 2.2. Label elements

Using the Toxicity Data listed in section 11 and 12 the product is labeled as follows.



**Warning**

H314 Causes severe skin burns and eye damage.

H318 Causes serious eye damage.

#### [Prevention]:

P260 Do not breathe mist / vapors / spray.

P264 Wash thoroughly after handling.

P280 Wear protective gloves / eye protection / face protection.

#### [Response]:

P301+330+331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

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P303+361 +353 IF ON SKIN (or hair): Remove I Take off immediately all contaminated clothing. Rinse skin with water / shower.

P304+340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P305+351 +338 IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do - continue rinsing.

P310 Immediately call a POISON CENTER or doctor / physician.

P363 Wash contaminated clothing before reuse.

### [Storage]:

P405 Store locked up.

### [Disposal]:

P501 Dispose of contents / container in accordance with local / national regulations.

## 3. Composition/information on ingredients

This product contains the following substances that present a hazard within the meaning of the relevant State and Federal Hazardous Substances regulations.

Ingredient/Chemical Designations	Weight %	GHS Classification	Notes
SODIUM HYDROXIDE CAS #: 1310-73-2	99.9	Skin Corr. 1B H314 Eye Dam. 1 H318 Aquatic Acute 3 H402	[1][2]

In accordance with paragraph (i) of §1910.1200, the specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

[1] Substance classified with a health or environmental hazard.

[2] Substance with a workplace exposure limit.

[3] PBT-substance or vPvB-substance.

\*The full texts of the phrases are shown in Section 16.

## 4. First aid measures

### 4.1. Description of first aid measures

#### General

In all cases of doubt, or when symptoms persist, seek medical attention.  
Never give anything by mouth to an unconscious person.

#### Inhalation

Move victim to fresh air. Give artificial respiration ONLY if breathing has stopped. Give Cardiopulmonary Resuscitation (CPR) if there is no breathing AND no pulse. Obtain medical attention IMMEDIATELY.

#### Eyes

Immediately flush eyes with running water for a minimum of 20 minutes. Hold eyelids open during flushing. If irritation persists, repeat flushing. Obtain medical attention IMMEDIATELY. Do not transport victim until the recommended flushing period is completed unless flushing can be continued during transport.

#### Skin

Flush skin with running water for a minimum of 20 minutes. Start flushing while removing contaminated clothing. If irritation persists, repeat flushing. Obtain medical attention IMMEDIATELY. Do not transport victim unless the recommended flushing period is completed or flushing can be continued during transport.

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While the patient is being transported to a medical facility, apply compresses of iced water. If medical treatment must be delayed, immerse the affected area in iced water. If immersion is not practical, compresses of iced water can be applied. Avoid freezing tissues.

## Ingestion

If victim is alert and not convulsing, rinse mouth and give 1/2 to 1 glass of water to dilute material. If spontaneous vomiting occurs, have victim lean forward with head down to avoid breathing in of vomitus, rinse mouth and administer more water. IMMEDIATELY contact local poison control center. Vomiting may need to be induced but should be directed by a physician or a poison control center. IMMEDIATELY transport victim to an emergency facility.

## 4.2. Most important symptoms and effects, both acute and delayed

### Overview

**IMMEDIATE CONCERNS:** CAUTION: May cause eye or skin burns. Avoid vapor.

### POTENTIAL SIDE EFFECTS

**EYES:** Tissue destruction and permanent eye damage may occur if not treated immediately.

**SKIN:** May be corrosive and cause severe burns.

**INGESTION:** Corrosive to mucous membranes of the mouth, esophagus, stomach & throat.

**INHALATION:** Avoid mist, can be a severe irritant.

**ACUTE TOXICITY:** Eye, skin, lung burning may be caused with exposure to mist. Avoid mist.

**TARGET ORGAN STATEMENT:** Contains material which may cause damage to gastrointestinal tract and respiratory tract.

Note to Physician: All treatments should be based on observed signs and symptoms of distress in the patient. Medical conditions that may be aggravated by exposure include asthma, bronchitis, emphysema and other lung diseases and chronic nose, sinus or throat conditions. Severity of the burn is generally determined by the concentration of the solution and the duration of exposure. In the event of skin or eye contact, immediate and thorough flushing is essential. Continued washing of the affected area with cold or iced water will be helpful in removing the last traces of sulfuric acid. Cream or ointments should not be applied before or during the washing phase of the treatment. See section 2 for further details.

### Eyes

Causes serious eye damage.

### Inhalation

Causes serious eye damage.

## 5. Fire-fighting measures

### 5.1. Extinguishing media

For small fires, use dry chemical or carbon dioxide. For large fires, flood fire area with water from a distance. Expect violent reaction with water. Do not get solid stream of water on spilled material.

### 5.2. Special hazards arising from the substance or mixture

Hazardous decomposition: Oxides of sulfur at high temperatures. Hazardous gases may evolve on contact with chemicals such as cyanides, sulfides, and carbides.

Do not breathe mist / vapors / spray.

### 5.3. Advice for fire-fighters

Wear self-contained breathing apparatus and protective clothing.

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ERG Guide No. ---137

## 6. Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

Put on appropriate personal protective equipment (see section 8).

### 6.2. Environmental precautions

Do not allow spills to enter drains or waterways.

Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

### 6.3. Methods and material for containment and cleaning up

Absorb spill with vermiculite or other inert material, then place in a container for chemical waste.

For Large Spills: Flush spill area with water spray. Prevent run-off from entering drains, sewers, or streams, collect run-off.

## 7. Handling and storage

### 7.1. Precautions for safe handling

Wear appropriate Personal Protection Equipment. Do not breathe sprays or mists. Do not ingest. Do not get in eyes, on skin or on clothing. Keep ignition sources away from sulfuric acid storage, handling and transportation equipment.

Handling Procedures and Equipment: Carbon steel or stainless-steel materials are suitable for use for acid concentrations equal to or greater than 93%. However, the effect of lower concentrations on the materials of construction can be very complex. Contact product supplier for specific recommendations when handling sulfuric acid at strengths less than 77%.

Sulfuric acid will attack some forms of plastics and coatings. Always add acid to water - not water to acid. If kept in upper floors of building, floors should be acid proof with drains to a recovery tank.

See section 2 for further details. - [Prevention]:

### 7.2. Conditions for safe storage, including any incompatibilities

Handle containers carefully to prevent damage and spillage.

Store between -5C and 40C.

Incompatible materials: Acids react with most metals to release hydrogen gas which can form explosive mixtures in air. Water, alkaline solutions, metals, metal powder, carbides, chlorates, fulminates, nitrates, picrates, strong oxidizers, reducers, or combustible organics.

Hazardous gases may evolve on contact with chemicals such as cyanides, sulfides, and carbides.

Storage Temperature: Store above freezing point. Elevated temperatures will increase the corrosion rate of most metals.

Storage Requirements: Store packaged acid in a dry, well, ventilated location away from combustibles, oxidizers, bases, or metallic powders. Storage tanks should be protected from water ingress, be well ventilated, and maintained structurally in a safe and reliable condition.

See section 2 for further details. - [Storage]:

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## 7.3. Specific end use(s)

No data available.

## 8. Exposure controls and personal protection

### 8.1. Control parameters

#### Exposure

CAS No.	Ingredient	Source	Value
1310-73-2	SODIUM HYDROXIDE	OSHA	2 mg/m <sup>3</sup>
		ACGIH	2 mg/m <sup>3</sup>
		NIOSH	No Established Limit
		Supplier	No Established Limit

#### Carcinogen Data

CAS No.	Ingredient	Source	Value
1310-73-2	SODIUM HYDROXIDE	OSHA	Select Carcinogen: No
		NTP	Known: No; Suspected: No
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;

### 8.2. Exposure controls

#### Respiratory

A NIOSH/MSHA approved air-purifying respirator equipped with acid gas/fume, dust, and mist cartridges for concentrations up to 10 mg 1m<sup>3</sup>. An air-supplied respirator if concentrations are higher or unknown.

#### Eyes

Tight-fitting chemical goggles and face shield.

#### Skin

Impervious (Le., neoprene, PVC) gloves, coveralls, boots and/or other acid resistant protective clothing.

#### Engineering Controls

Local exhaust ventilation required.

#### Other Work Practices

Where there is a danger of spilling or splashing, acid resistant aprons or suits should be worn. Trouser legs should be worn outside (not tucked in) rubber boots. Safety showers and eyewash fountains should be installed in storage and handling areas. Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

See section 2 for further details. - [Prevention]:



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## 9. Physical and chemical properties

<b>Appearance</b>	White Beads / Flakes
<b>Odor</b>	Sharp
<b>Odor threshold</b>	Not Measured
<b>pH</b>	Not Measured
<b>Melting point / freezing point</b>	77.67%: -11.2C (+11.6F); 93.19%: - 29.5C (- 21.1F) 98%: 1-1C (30F)
<b>Initial boiling point and boiling range</b>	77.67%: 193C (380F); 93.19: 276C (529F) 98%: 330 (626F)
<b>Flash Point</b>	None
<b>Evaporation rate (Ether = 1)</b>	Not Measured
<b>Flammability (solid, gas)</b>	Not Applicable
<b>Upper/lower flammability or explosive limits</b>	<b>Lower Explosive Limit:</b> 135C(275F): NA <b>Upper Explosive Limit:</b> 199C(390F): NA
<b>Vapor pressure (Pa)</b>	77.67 % 1.2mmhg; 93.19% : 0.0016 mmhg; 98% 0.002 mmhg (at 40C/102F)
<b>Vapor Density</b>	3.4, sulfuric acid component (Air = 1)
<b>Specific Gravity</b>	77.67%: 1.7059; 93.19% 1.8354; 98%: (at 15C/ 60F)
<b>Solubility in Water</b>	Insoluble
<b>Partition coefficient n-octanol/water (Log Kow)</b>	Not Measured
<b>Auto-ignition temperature</b>	(ASTM D 2155): Not combustible
<b>Decomposition temperature</b>	Not Measured
<b>Viscosity (cSt)</b>	Not Measured
<b>Volatiles (% by weight)</b>	NA
<b>Octanol/Water Partition Coefficient</b>	NA
<b>9.2. Other information</b>	No other relevant information.

## 10. Stability and reactivity

### 10.1. Reactivity

Hazardous Polymerization will not occur.

### 10.2. Chemical stability

Stable under normal circumstances.

### 10.3. Possibility of hazardous reactions

Reacts with some bases.

### 10.4. Conditions to avoid

Keep away from extreme heat and extreme cold.

### 10.5. Incompatible materials

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07/01/2018



Acids react with most metals to release hydrogen gas which can form explosive mixtures in air. Water, alkaline solutions, metals, metal powder, carbides, chlorates, fulminates, nitrates, picrates, strong oxidizers, reducers, or combustible organics.

Hazardous gases may evolve on contact with chemicals such as cyanides, sulfides, and carbides.

## 10.6. Hazardous decomposition products

Oxides of sulfur at high temperatures. Hazardous gases may evolve on contact with chemicals such as cyanides, sulfides, and carbides.

## 11. Toxicological information

### Acute toxicity

Ingredient	Oral LD50, mg/kg	Skin LD50, mg/kg	Inhalation Vapor LC50, mg/L/4hr	Inhalation Dust/Mist LC50, mg/L/4hr	Inhalation Gas LC50, ppm
SODIUM HYDROXIDE (1310-73-2)	No data available	1350 mg/kg Rabbit;	No data available	No data available	No data available

Note: When no route specific LD50 data is available for an acute toxin, the converted acute toxicity point estimate was used in the calculation of the product's ATE (Acute Toxicity Estimate).

Classification	Category	Hazard Description
Acute toxicity (oral)	---	Not Applicable
Acute toxicity (dermal)	---	Not Applicable
Acute toxicity (inhalation)	---	Not Applicable
Skin corrosion/irritation	1A	Causes severe skin burns and eye damage.
Serious eye damage/irritation	1	Causes serious eye damage.
Respiratory sensitization	---	Not Applicable
Skin sensitization	---	Not Applicable
Germ cell mutagenicity	---	Not Applicable
Carcinogenicity	---	Not Applicable
Reproductive toxicity	---	Not Applicable
STOT-single exposure	---	Not Applicable
STOT-repeated exposure	---	Not Applicable
Aspiration hazard	---	Not Applicable

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## 12. Ecological information

### 12.1. Toxicity

The preparation has been assessed following the conventional method of the Dangerous Preparations Directive 1999/45/EC and GHS and is not classified as dangerous for the environment but contains substance(s) dangerous for the environment. See section 3 for details

### Aquatic Ecotoxicity

Ingredient	96 hr. LC50 fish, mg/l	48 hr. EC50 crustacea, mg/l	ErC50 algae, mg/l
SODIUM HYDROXIDE (1310-73-2)	45.4 mg/l	40.4 mg/l	Not Available

### 12.2. Persistence and degradability

There is no data available on the preparation itself.

### 12.3. Bioaccumulative potential

Not Measured

### 12.4. Mobility in soil

No data available.

### 12.5. Results of PBT and vPvB assessment

This product contains no PBT/vPvB chemicals.

### 12.6. Other adverse effects

No data available.

## 13. Disposal considerations

### 13.1. Waste treatment methods

Observe all federal, state and local regulations when disposing of this substance.

## 14. Transport information

NOTE: Containers holding less than 1 kilo (2.2 lbs.) are shipped as non-hazardous ORM-d. Below data is for containers holding greater than 2.2 lbs.

	DOT (Domestic Surface Transportation)	IMO / IMDG (Ocean Transportation)	ICAO/IATA
14.1. UN number	UN 1823	UN 1823	UN 1823
14.2. UN proper shipping name	UN 1823, Sodium Hydroxide, Solid, 8, II	UN 1823, Sodium Hydroxide, Solid	UN 1823, Sodium Hydroxide, Solid
14.3. Transport hazard class(es)	DOT Hazard Class: 8	IMDG: 8 Sub Class: Not Applicable	Air Class: 8
14.4. Packing group	II	II	II
14.5. Environmental hazards			
IMDG	Marine Pollutant: No		
14.6. Special precautions for user			

# Safety Data Sheet

PURE LYE

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No further information

## 15. Regulatory information

<b>Regulatory Overview</b>	The regulatory data in Section 15 is not intended to be all-inclusive, only selected regulations are represented.
<b>Toxic Substance Control Act (TSCA)</b>	All components of this material are either listed or exempt from listing on the TSCA Inventory.
<b>WHMIS Classification</b>	D2B E
<b>US EPA Tier II Hazards</b>	<b>Fire:</b> No <b>Sudden Release of Pressure:</b> No <b>Reactive:</b> Yes <b>Immediate (Acute):</b> Yes <b>Delayed (Chronic):</b> No

### EPCRA 311/312 Chemicals and RQs: (lbs)

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

### EPCRA 302 Extremely Hazardous:

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

### EPCRA 313 Extremely Hazardous:

SODIUM HYDROXIDE

### Proposition 65 - Carcinogens (>0.0%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

**Proposition 65 - Developmental Toxins (>0.0%):** To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

**Proposition 65 - Female Repro Toxins (>0.0%):** To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

### Proposition 65 - Male Repro Toxins (>0.0%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

### New Jersey RTK Substances (>1%):

SODIUM HYDROXIDE

### Pennsylvania RTK Substances (>1%):

SODIUM HYDROXIDE

# Safety Data Sheet

PURE LYE

SDS Revision Date:

07/01/2018



## 16. Other information

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein. We accept no responsibility and disclaim all liability for any harmful effects which may be caused by exposure to our products. Customers/users of this product must comply with all applicable health and safety laws, regulations, and orders.

The full text of the phrases appearing in section 3 is:  
H314 Causes severe skin burns and eye damage.

**This is the first version in the GHS SDS format. Listings of changes from previous versions in other formats are not applicable.**

The opinions expressed are those of qualified experts within ComStar International Inc. We believe that the information contained is current as of the date of the Safety Data Sheet. Since the use of this information and of these opinions and the conditions of the use of the product are not within the control of ComStar International Inc., it is the user's obligation to determine the conditions of safe use of the product.

End of Document

# FLINN SCIENTIFIC, INC.

## Safety Data Sheet (SDS)

SDS #: 263.00

Revision Date: March 21, 2014

### SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

#### Congo Red

Flinn Scientific, Inc. P.O. Box 219, Batavia, IL 60510 (800) 452-1261

CHEMTREC Emergency Phone Number: (800) 424-9300

Signal Word **DANGER**

Pictograms



### SECTION 2 — HAZARDS IDENTIFICATION

Hazard class: Carcinogenicity (Category 1). May cause cancer (H350). Obtain special instructions before use (P201). Do not handle until all safety precautions have been read and understood (P202). Use personal protective equipment as required (P281). A probable human carcinogen (IARC-2A).

Hazard class: Reproductive toxicity (Category 2). May damage fertility or the unborn child (H361). Obtain special instructions before use (P201).

Hazard class: Serious eye damage or irritation (Category 2A). Causes serious eye irritation (H319).

### SECTION 3 — COMPOSITION, INFORMATION ON INGREDIENTS

Component Name	CAS Number	Formula	Formula Weight	Concentration
Congo red	573-58-0	$C_{32}H_{22}N_6Na_2O_6S_2$	696.67	
Synonyms: Direct red 28; Cotton red; C.I. 22120				

### SECTION 4 — FIRST AID MEASURES

**If exposed or concerned:** Get medical advice or attention (P308+P313).

**If inhaled:** Remove victim to fresh air and keep at rest in a position comfortable for breathing.

**If in eyes:** Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do so. Continue rinsing (P305+P351+P338). **If eye irritation persists:** Get medical advice or attention (P337+P313).

**If on skin:** Wash with plenty of water.

**If swallowed:** Rinse mouth. Call a POISON CENTER or physician if you feel unwell.

### SECTION 5 — FIRE FIGHTING MEASURES

Nonflammable solid.

When heated to decomposition, may emit toxic fumes.

**In case of fire:** Use a tri-class dry chemical fire extinguisher.

**NFPA CODE**  
None  
established

### SECTION 6 — ACCIDENTAL RELEASE MEASURES

Sweep up the spill, place in a sealed bag or container, and dispose. Ventilate area and wash spill site after material pickup is complete. See Sections 8 and 13 for further information.

---

**SECTION 7 — HANDLING AND STORAGE**

---

Flinn Suggested Chemical Storage Pattern: Organic #9. Store with dyes, indicators and stains.  
Keep container tightly closed. Store in a cool, dry place.

---

**SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION**

---

Wear protective gloves, protective clothing, and eye protection (P280). Wash hands thoroughly after handling (P264). Will stain skin, clothing, and surfaces.

---

**SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES**

---

Dark brown-red powder. Odorless.  
Soluble: Water and alcohol

Absorbance maximum: 497 nm  
Biological stain.  
pH indicator: 3.0 blue to 5.0 red.

---

**SECTION 10 — STABILITY AND REACTIVITY**

---

Avoid contact with strong oxidizers.  
Shelf life: Indefinite, if stored properly.

---

**SECTION 11 — TOXICOLOGICAL INFORMATION**

---

Acute effects: Toxic and eye irritant.  
Chronic effects: N.A.  
Target organs: N.A.

ORL-RAT LD<sub>50</sub>: 15,200 mg/kg  
IHL-RAT LC<sub>50</sub>: N.A.  
SKN-RBT LD<sub>50</sub>: N.A.

N.A. = Not available, not all health aspects of this substance have been fully investigated.

---

**SECTION 12 — ECOLOGICAL INFORMATION**

---

Data not yet available.

---

**SECTION 13 — DISPOSAL CONSIDERATIONS**

---

Please review all federal, state and local regulations that may apply before proceeding.  
Flinn Suggested Disposal Method #26a is one option.

---

**SECTION 14 — TRANSPORT INFORMATION**

---

Shipping name: Not regulated. Hazard class: N/A. UN number: N/A.

N/A = Not applicable

---

**SECTION 15 — REGULATORY INFORMATION**

---

TSCA-listed, EINECS-listed (209-358-4).

---

**SECTION 16 — OTHER INFORMATION**

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This Safety Data Sheet (SDS) is for guidance and is based upon information and tests believed to be reliable. Flinn Scientific, Inc. makes no guarantee of the accuracy or completeness of the data and shall not be liable for any damages relating thereto. The data is offered solely for your consideration, investigation, and verification. The data should not be confused with local, state, federal or insurance mandates, regulations, or requirements and CONSTITUTE NO WARRANTY. Any use of this data and information must be determined by the science instructor to be in accordance with applicable local, state or federal laws and regulations. The conditions or methods of handling, storage, use and disposal of the product(s) described are beyond the control of Flinn Scientific, Inc. and may be beyond our knowledge. FOR THIS AND OTHER REASONS, WE DO NOT ASSUME RESPONSIBILITY AND EXPRESSLY DISCLAIM LIABILITY FOR LOSS, DAMAGE OR EXPENSE ARISING OUT OF OR IN ANY WAY CONNECTED WITH THE HANDLING, STORAGE, USE OR DISPOSAL OF THIS PRODUCT(S).

Consult your copy of the *Flinn Science Catalog/Reference Manual* for additional information about laboratory chemicals.

Revision Date: March 21, 2014

# FLINN SCIENTIFIC, INC.

## Safety Data Sheet (SDS)

SDS #: 265.00

Revision Date: January 21, 2014

### SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

#### Copper

Flinn Scientific, Inc. P.O. Box 219, Batavia, IL 60510 (800) 452-1261

CHEMTREC Emergency Phone Number: (800) 424-9300

Signal Word N/A

Pictograms

### SECTION 2 — HAZARDS IDENTIFICATION

This chemical is considered nonhazardous according to GHS classifications for the Hazard Communication Standard. Treat all laboratory chemicals with caution.

Although this material is considered to be nonhazardous, unpredictable reactions among chemicals are always possible. Prudent laboratory practices should be observed.

### SECTION 3 — COMPOSITION, INFORMATION ON INGREDIENTS

Component Name	CAS Number	Formula	Formula Weight	Concentration
Copper	7440-50-8	Cu	63.55	

### SECTION 4 — FIRST AID MEASURES

Call a POISON CENTER or physician if you feel unwell.

**If inhaled:** Remove victim to fresh air and keep at rest in a position comfortable for breathing.

**If in eyes:** Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do so. Continue rinsing.

**If on skin:** Wash with plenty of water.

**If swallowed:** Rinse mouth. Call a POISON CENTER or physician if you feel unwell.

### SECTION 5 — FIRE FIGHTING MEASURES

Nonflammable solid.

Noncombustible solid in bulk form, but air-born dust may ignite.

**In case of fire:** Use a tri-class dry chemical fire extinguisher.

**NFPA CODE**  
None  
established

### SECTION 6 — ACCIDENTAL RELEASE MEASURES

Sweep up the spill, place in a sealed bag or container, and dispose. Ventilate area and wash spill site after material pickup is complete. See Sections 8 and 13 for further information.



---

**SECTION 7 — HANDLING AND STORAGE**

---

Flinn Suggested Chemical Storage Pattern: Inorganic #1. Store with metals and metal hydrides.

---

**SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION**

---

Wear protective gloves, protective clothing, and eye protection. Wash hands thoroughly after handling.

---

**SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES**

---

Red-brown ductile metal. Also granules, shot, powder, sheet, wire, and foil turnings. Odorless.

Soluble: Nitric acid and hot sulfuric acid

Melting point: 1083 °C

Specific gravity: 8.92

TLV: 1 mg/cubic meter as dust or fume

---

**SECTION 10 — STABILITY AND REACTIVITY**

---

Avoid contact with strong oxidizers, strong acids, bromates, chlorates, iodates, and halogens. Avoid contact with nitric acid, emits toxic fumes of nitrogen oxides.

Shelf life: Indefinite, if stored properly.

---

**SECTION 11 — TOXICOLOGICAL INFORMATION**

---

Acute effects: N.A.

Chronic effects: N.A.

Target organs: N.A.

ORL-RAT LD<sub>50</sub>: N.A.

IHL-RAT LC<sub>50</sub>: N.A.

SKN-RBT LD<sub>50</sub>: N.A.

N.A. = Not available, not all health aspects of this substance have been fully investigated.

---

**SECTION 12 — ECOLOGICAL INFORMATION**

---

Data not yet available.

---

**SECTION 13 — DISPOSAL CONSIDERATIONS**

---

Please review all federal, state and local regulations that may apply before proceeding.

Flinn Suggested Disposal Method #26a is one option.

---

**SECTION 14 — TRANSPORT INFORMATION**

---

Shipping name: Not regulated. Hazard class: N/A. UN number: N/A.

N/A = Not applicable

---

**SECTION 15 — REGULATORY INFORMATION**

---

TSCA-listed, EINECS-listed (231-159-6), RCRA code D001.

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**SECTION 16 — OTHER INFORMATION**

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This Safety Data Sheet (SDS) is for guidance and is based upon information and tests believed to be reliable. Flinn Scientific, Inc. makes no guarantee of the accuracy or completeness of the data and shall not be liable for any damages relating thereto. The data is offered solely for your consideration, investigation, and verification. The data should not be confused with local, state, federal or insurance mandates, regulations, or requirements and CONSTITUTE NO WARRANTY. Any use of this data and information must be determined by the science instructor to be in accordance with applicable local, state or federal laws and regulations. The conditions or methods of handling, storage, use and disposal of the product(s) described are beyond the control of Flinn Scientific, Inc. and may be beyond our knowledge. FOR THIS AND OTHER REASONS, WE DO NOT ASSUME RESPONSIBILITY AND EXPRESSLY DISCLAIM LIABILITY FOR LOSS, DAMAGE OR EXPENSE ARISING OUT OF OR IN ANY WAY CONNECTED WITH THE HANDLING, STORAGE, USE OR DISPOSAL OF THIS PRODUCT(S).

**Consult your copy of the *Flinn Science Catalog/Reference Manual* for additional information about laboratory chemicals.**

**Revision Date:** January 21, 2014

# Safety Data Sheet

## Copper (II) Chloride, Anhydrous

**CAROLINA**<sup>®</sup>  
www.carolina.com

### Section 1 Product Description

**Product Name:** Copper (II) Chloride, Anhydrous  
**Recommended Use:** Science education applications  
**Synonyms:** Cupric Chloride  
**Distributor:** Carolina Biological Supply Company  
2700 York Road, Burlington, NC 27215  
1-800-227-1150  
**Chemical Information:** 800-227-1150 (8am-5pm (ET) M-F)  
**Chemtrec:** 800-424-9300 (Transportation Spill Response 24 hours)

### Section 2 Hazard Identification

Classification of the chemical in accordance with paragraph (d) of §1910.1200;

**DANGER**



Toxic if swallowed. Causes skin irritation. Causes serious eye irritation. Very toxic to aquatic life. Very toxic to aquatic life with long lasting effects.

**GHS Classification:**

Hazardous to the aquatic environment - Acute Category 1, Hazardous to the aquatic environment - Chronic Category 1, Skin Corrosion/Irritation Category 2, Serious Eye Damage/Eye Irritation Category 2A, Acute Toxicity - Oral Category 3

### Section 3 Composition / Information on Ingredients

<u>Chemical Name</u>	<u>CAS #</u>	<u>%</u>
Copper (II) Chloride, Anhydrous	7447-39-4	100

### Section 4 First Aid Measures

**Emergency and First Aid Procedures**

**Inhalation:** In case of accident by inhalation: remove casualty to fresh air and keep at rest.  
**Eyes:** IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.  
**Skin Contact:** IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse.  
**Ingestion:** IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

### Section 5 Firefighting Procedures

**Extinguishing Media:** Use media suitable to extinguish surrounding fire.  
**Fire Fighting Methods and Protection:** Firefighters should wear full protective equipment and NIOSH approved self-contained breathing apparatus.  
**Fire and/or Explosion Hazards:** Fire or excessive heat may produce hazardous decomposition products.  
**Hazardous Combustion Products:** Hydrogen chloride

### Section 6 Spill or Leak Procedures

# Safety Data Sheet

## Steps to Take in Case Material Is Released or Spilled:

Exposure to the spilled material may be severely irritating or toxic. Follow personal protective equipment recommendations found in Section 8 of this SDS. Personal protective equipment needs must be evaluated based on information provided on this sheet and the special circumstances created by the spill including; the material spilled, the quantity of the spill, the area in which the spill occurred, and the expertise of employees in the area responding to the spill. Never exceed any occupational exposure limits.

Prevent the spread of any spill to minimize harm to human health and the environment if safe to do so. Wear complete and proper personal protective equipment following the recommendation of Section 8 at a minimum. Dike with suitable absorbent material like granulated clay. Gather and store in a sealed container pending a waste disposal evaluation. Collect spillage.

## Section 7

## Handling and Storage

**Handling:** Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection.

**Storage:** Store locked up. Keep container tightly closed in a cool, well-ventilated place.

**Storage Code:** White - Corrosive. Separate acids from bases; separate oxidizer acids from organic acids.

## Section 8

## Protection Information

Chemical Name	ACGIH		OSHA PEL	
	(TWA)	(STEL)	(TWA)	(STEL)
Copper (II) Chloride, Anhydrous	1 mg/m <sup>3</sup> TWA (dust and mist, as Cu)	N/A	N/A	N/A

### Control Parameters

#### Engineering Measures:

Local exhaust ventilation or other engineering controls are normally required when handling or using this product to avoid overexposure.

#### Personal Protective Equipment (PPE):

Lab coat, apron, eye wash, safety shower.

#### Respiratory Protection:

#### Respirator Type(s):

None required where adequate ventilation is provided. If airborne concentrations are above the applicable exposure limits, use NIOSH/MSHA approved respiratory protection.

#### Eye Protection:

Wear chemical splash goggles when handling this product. Have an eye wash station available.

#### Skin Protection:

Avoid skin contact by wearing chemically resistant gloves, an apron and other protective equipment depending upon conditions of use. Inspect gloves for chemical break-through and replace at regular intervals. Clean protective equipment regularly. Wash hands and other exposed areas with mild soap and water before eating, drinking, and when leaving work.

#### Gloves:

No information available

## Section 9

## Physical Data

**Formula:** CuCl<sub>2</sub>  
**Molecular Weight:** 134.45  
**Appearance:** Yellow to Brown Crystalline Solid  
**Odor:** No data available  
**Odor Threshold:** No data available  
**pH:** No data available  
**Melting Point:** 630 C  
**Boiling Point:** No data available  
**Flash Point:** No data available  
**Flammable Limits in Air:** No data available

**Vapor Pressure:** No data available  
**Evaporation Rate (BuAc=1):** No data available  
**Vapor Density (Air=1):** No data available  
**Specific Gravity:** 3.39 at 20 °C  
**Solubility in Water:** Soluble  
**Log Pow (calculated):** No data available  
**Autoignition Temperature:** No data available  
**Decomposition Temperature:** 993 C  
**Viscosity:** No data available  
**Percent Volatile by Volume:** No data available

## Section 10

## Reactivity Data

**Reactivity:** Mildly reactive - See below  
**Chemical Stability:** Stable under normal conditions.  
**Conditions to Avoid:** Exposure to moisture  
**Incompatible Materials:** Hypobromite, Sodium Metal, Potassium Metal, Strong acids  
**Hazardous Decomposition Products:** Hydrogen chloride  
**Hazardous Polymerization:** Will not occur

# Safety Data Sheet

## Section 11

## Toxicity Data

**Routes of Entry:** Inhalation and ingestion.  
**Symptoms (Acute):** Convulsions, Tachycardia, Paralysis, Hypotension, Gastric Hemorrhage, Hemolytic Crisis  
**Delayed Effects:** Hepatolenticular Degeneration (Wilson's Disease)

### Acute Toxicity:

Chemical Name	CAS Number	Oral LD50	Dermal LD50	Inhalation LC50
Copper (II) Chloride, Anhydrous	7447-39-4	Oral LD50 Mouse 233 mg/kg Oral LD50 Mouse 110 mg/kg Oral LD50 Rat 584 mg/kg	Not determined	Not determined

### Carcinogenicity:

Chemical Name	CAS Number	IARC	NTP	OSHA
Copper (II) Chloride, Anhydrous	7447-39-4	Not listed	Not listed	Not listed

### Chronic Effects:

**Mutagenicity:** No evidence of a mutagenic effect.  
**Teratogenicity:** No evidence of a teratogenic effect (birth defect).  
**Sensitization:** No evidence of a sensitization effect.  
**Reproductive:** No evidence of negative reproductive effects.  
**Target Organ Effects:**  
**Acute:** Kidneys, Liver  
**Chronic:** No data available

## Section 12

## Ecological Data

**Overview:** Severe ecological hazard. This product may be toxic to plants and/or wildlife.  
**Mobility:** No data  
**Persistence:** No data  
**Bioaccumulation:** No data  
**Degradability:** No data  
**Other Adverse Effects:** No data

Chemical Name	CAS Number	Eco Toxicity
Copper (II) Chloride, Anhydrous	7447-39-4	Aquatic EC50 (48h) Daphnia 0.04 MG/L

## Section 13

## Disposal Information

**Disposal Methods:** Dispose in accordance with all applicable Federal, State and Local regulations. Always contact a permitted waste disposer (TSD) to assure compliance.  
**Waste Disposal Code(s):** Not Determined

## Section 14

## Transport Information

Ground - DOT Proper Shipping Name:	Air - IATA Proper Shipping Name:
UN2802 Copper Chloride Class 8 P.G. III	UN2802 Copper Chloride Class 8 P.G. III

## Section 15

## Regulatory Information

**TSCA Status:** All components in this product are on the TSCA Inventory.

Chemical Name	CAS Number	§ 313 Name	§ 304 RQ	CERCLA RQ	§ 302 TPQ	CAA 112(2) TQ
Copper (II) Chloride, Anhydrous	7447-39-4	No	10 lb RQ	10 lb final RQ; 4.54 kg final RQ	No	No

# Safety Data Sheet

California Prop 65:

No California Proposition 65 ingredients

## Section 16

## Additional Information

Revised: 08/21/2018

Replaces: 06/15/2018

Printed: 08-25-2018

The information provided in this (Material) Safety Data Sheet represents a compilation of data drawn directly from various sources available to us. Carolina Biological Supply makes no representation or guarantee as to the suitability of this information to a particular application of the substance covered in the (Material) Safety Data Sheet.

### Glossary

ACGIH	American Conference of Governmental Industrial Hygienists	NTP	National Toxicology Program
CAS	Chemical Abstract Service Number	OSHA	Occupational Safety and Health Administration
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act	PEL	Permissible Exposure Limit
DOT	U.S. Department of Transportation	ppm	Parts per million
IARC	International Agency for Research on Cancer	RCRA	Resource Conservation and Recovery Act
N/A	Not Available	SARA	Superfund Amendments and Reauthorization Act
		TLV	Threshold Limit Value
		TSCA	Toxic Substances Control Act
		IDLH	Immediately dangerous to life and health

## Section 1 Chemical Product and Company Identification

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**Aldon  
Corporation**

221 Rochester Street  
Avon, NY 14414  
(585) 226-6177

**CHEMTREC 24 Hour Emergency  
Phone Number (800) 424-9300**  
For laboratory use only.  
Not for drug, food or household use.

**Product** COPPER(II) CHLORIDE, ANHYDROUS  
**Synonyms** Cupric Chloride, Anhydrous

## Section 2 Hazards Identification

**Signal word:** DANGER

**Pictograms:** GHS06 / GHS07 / GHS09

**Target organs:** Respiratory system, Liver, Kidneys.

**GHS Classification:**

Acute toxicity-oral (Category 3)

Skin irritation (Category 2)

Eye irritation (Category 2A)

Aquatic acute toxicity (Category 1)

Aquatic chronic toxicity (Category 1)

**GHS Label information: Hazard statement:**

H301: Toxic if swallowed.

H315: Causes skin irritation.

H319: Causes serious eye irritation.

H410: Very toxic to aquatic life with long lasting effects.

**Precautionary statement:**

P264: Wash hands thoroughly after handling.

P270: Do not eat, drink or smoke when using this product.

P273: Avoid release to the environment.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

P301+P330+P310: IF SWALLOWED: Rinse mouth. Immediately call a POISON CENTER or doctor.

P302+P352: IF ON SKIN: Wash with plenty of water and soap.

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

P332+P313: If skin irritation occurs: Get medical advice/attention.

P337+P313: If eye irritation persists: Get medical advice/attention.

P362+P364: Take off contaminated clothing and wash before reuse.

P391: Collect spillage.

P405: Store locked up.

P501: Dispose of contents/container to a licensed chemical disposal agency in accordance with local/regional/national regulations.

Ca Prop 65: This product does not contain any chemicals known to the State of California to cause cancer or reproductive toxicity.

## Section 3 Composition/Information on Ingredients

Chemical Name	CAS #	%	EINECS
Cupric chloride, anhydrous	7447-39-4	>98%	231-210-2 (anhydrous)

**INGESTION:** HARMFUL IF SWALLOWED. Call physician or Poison Control Center immediately. Induce vomiting only if advised by appropriate medical personnel. Never give anything by mouth to an unconscious person.

**INHALATION:** MAY BE HARMFUL IF INHALED. CAUSES RESPIRATORY TRACT IRRITATION. Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

**EYE CONTACT:** CAUSES SEVERE EYE IRRITATION. Check for and remove contact lenses. Flush thoroughly with water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get immediate medical attention.

**SKIN ABSORPTION:** MAY CAUSE SKIN IRRITATION. Remove contaminated clothing. Flush thoroughly with mild soap and water. If irritation occurs, get medical attention.

**Suitable Extinguishing Media:** Use any media suitable for extinguishing supporting fire

**Protective Actions for Fire-fighters:** In fire conditions, wear a NIOSH/MSHA-approved self-contained breathing apparatus and full protective gear. Use water spray to keep fire-exposed containers cool.

**Specific Hazards:** During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

**Personal Precautions:** Evacuate personnel to safe area. Use proper personal protective equipment as indicated in Section 8. Provide adequate ventilation.

**Environmental Precautions:** Avoid runoff into storm sewers and ditches which lead to waterways.

**Containment and Cleanup:** Sweep or vacuum up and place in a suitable container for proper disposal. Wash spill area with soap and water.

**Section 7: Handling & Storage**

Page E2 of E3

**Precautions for Safe Handling:** Read label on container before using. Do not wear contact lenses when working with chemicals. Keep out of reach of children. Avoid contact with eyes, skin and clothing. Do not inhale dusts. Use with adequate ventilation. Avoid ingestion. Wash thoroughly after handling. Remove and wash clothing before reuse.

**Conditions for Safe Storage:** Store in a cool, dry, well-ventilated area away from incompatible substances.

**Section 8: Exposure Controls / Personal Protection**

Exposure Limits:	Chemical Name	ACGIH (TLV)	OSHA (PEL)	NIOSH (REL)
	Copper, dusts and mists, as Cu	TWA: 1 mg/m <sup>3</sup>	TWA: 1 mg/m <sup>3</sup>	TWA: 1 mg/m <sup>3</sup>

**Engineering controls:** Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower and fire extinguishing material. Personnel should wear safety glasses, goggles, or faceshield, lab coat or apron, appropriate protective gloves. Use adequate ventilation to keep airborne concentrations low.

**Respiratory protection:** None should be needed in normal laboratory handling at room temperatures. If dusty conditions prevail, work in fume hood or wear a NIOSH/MSHA-approved respirator.

**Section 9: Physical & Chemical Properties**

<b>Appearance:</b> Yellow-brown, crystalline solid	<b>Evaporation rate ( = 1):</b> Not applicable	<b>Partition coefficient:</b> Data not available
<b>Odor:</b> Odorless	<b>Flammability (solid/gas):</b> Not applicable	<b>Auto-ignition temperature:</b> Data not available
<b>Odor threshold:</b> Data not available	<b>Explosion limits: Lower / Upper:</b> Not applicable	<b>Decomposition temperature:</b> Data not available
<b>pH:</b> Data not available	<b>Vapor pressure (mm Hg):</b> Data not available	<b>Viscosity:</b> Data not available.
<b>Melting / Freezing point:</b> 100°C (230°F)	<b>Vapor density (Air = 1):</b> Data not available	<b>Molecular formula:</b> CuCl <sub>2</sub>
<b>Boiling point:</b> Decomposes	<b>Relative density (Specific gravity):</b> 2.54	<b>Molecular weight:</b> 134.45
<b>Flash point:</b> Non-flammable	<b>Solubility(ies):</b> Soluble in water	

**Chemical stability:** Stable

**Hazardous polymerization:** Will not occur.

**Conditions to avoid:** Hygroscopic material. Avoid exposure or contact to extreme temperatures and incompatible materials.

**Incompatible materials:** Potassium, sodium, hydrazine, nitromethane, aluminum, strong oxidizers, acetylene and sodium hypobromite.

**Hazardous decomposition products:** Copper oxides and hydrogen chloride.

**Acute toxicity:** Oral-rat LD50: 290 mg/kg ; Oral-human LD50: 200 mg/kg

**Skin corrosion/irritation:** Data not available

**Serious eye damage/irritation:** Data not available

**Respiratory or skin sensitization:** Data not available

**Germ cell mutagenicity:** Data not available

**Carcinogenicity:** Data not available

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**Reproductive toxicity:** Data not available

**STOT-single exposure:** Data not available

**STOT-repeated exposure:** Data not available

**Aspiration hazard:** Data not available

**Potential health effects:**

Inhalation: Symptoms of over-exposure may include irritation, sore throat, shortness of breath, ulceration and perforation of the nasal septum and upper respiratory tract irritation.

Ingestion: May cause gastrointestinal irritation with symptoms such as nausea, vomiting and diarrhea.

Skin: Contact with skin may cause symptoms of itching, redness, blistering and possible scarring, dermatitis.

Eyes: Contact with eyes may cause redness, pain and blurred vision. Prolonged contact may cause corneal injury.

**Signs and symptoms of exposure:** Copper salts impart a metallic taste in the mouth. Damage to the kidneys may occur in person's with Wilson's disease. High concentrations in contact with skin may result in burns. Chronic exposure may also lead to liver damage, anemia and other blood cell abnormalities.

**Additional information:** RTECS #: GL7030000

**Toxicity to fish:** Bluegill LC50: 0.9 mg/L/96 hours

**Toxicity to daphnia and other aquatic invertebrates:** Daphnia magna EC50: 0.04 mg/L/48 hours

**Toxicity to algae:** Selenastrum EC50: 0.12 mg/L/96 hours

**Persistence and degradability:** No data available

**Bioaccumulative potential:** No data available

**Mobility in soil:** No data available

**PBT and vPvB assessment:** No data available

**Other adverse effects:** An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

These disposal guidelines are intended for the disposal of catalog-size quantities only. Federal regulations may apply to empty container. State and/or local regulations may be different. Dispose of in accordance with all local, state and federal regulations or contract with a licensed chemical disposal agency.

**UN/NA number:** UN2802

**Shipping name:** Copper chloride

**Hazard class:** 8

**Packing group:** III

**Reportable Quantity:** 10 lbs (4.54 kg)

**Marine pollutant:** Yes

**Exceptions:** Limited quantity equal to or less than 4.539 Kg ; Reportable quantity equal to or more than 4.54 Kg

**2016 ERG Guide #** 154

A chemical is considered to be listed if the CAS number for the anhydrous form is on the Inventory list.

Component	TSCA	CERCLA (RQ)	RCRA code	DSL	NDSL
Cupric chloride (anhydrous)	Listed	10 lbs (4.54 kg)	Not listed	Listed	Not listed

The information contained herein is furnished without warranty of any kind. Employers should use this information only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees. NTP: National Toxicology Program, IARC: International Agency for Research on Cancer, OSHA: Occupational Safety and Health Administration, STOT: Specific Target Organ Toxicity, SE: Single Exposure, RE: Repeated Exposure, ERG: Emergency Response Guidebook.

**Section 1 Chemical Product and Company Information**

Page 1 of 2



5100 West Henrietta Rd  
PO Box 92912  
Rochester, NY 14692-9012  
Tel: (800) 962-2660

CHEMTREC 24 Hour Emergency  
Phone Number (800) 424-9300  
For laboratory use only.  
Not for drug, food or household use.

**Product** COPPER(II) CHLORIDE, ANHYDROUS

**Synonyms** Cupric Chloride, Anhydrous

**Section 2 Hazards Identification**

**Signal word:** DANGER

**Pictograms:** GHS06 / GHS07 / GHS09

**Target organs:** Respiratory system, Liver, Kidneys.

**GHS Classification:**

Acute toxicity-oral (Category 3)

Skin irritation (Category 2)

Eye irritation (Category 2A)

Aquatic acute toxicity (Category 1)

Aquatic chronic toxicity (Category 1)

**GHS Label information: Hazard statement:**

H301: Toxic if swallowed.

H315: Causes skin irritation.

H319: Causes serious eye irritation.

H410: Very toxic to aquatic life with long lasting effects.

**Precautionary statement:**

P264: Wash hands thoroughly after handling.

P270: Do not eat, drink or smoke when using this product.

P273: Avoid release to the environment.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

P301+P330+P310: IF SWALLOWED: Rinse mouth. Immediately call a POISON CENTER or doctor.

P302+P352: IF ON SKIN: Wash with plenty of water and soap.

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

P332+P313: If skin irritation occurs: Get medical advice/attention.

P337+P313: If eye irritation persists: Get medical advice/attention.

P362+P364: Take off contaminated clothing and wash before reuse.

P391: Collect spillage.

P405: Store locked up.

P501: Dispose of contents/container to a licensed chemical disposal agency in accordance with local/regional/national regulations.

Ca Prop 65 - This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm.

**Section 3 Composition / Information on Ingredients**

Chemical Name	CAS #	%	EINECS
Cupric chloride, anhydrous	7447-39-4	>98%	231-210-2 (anhydrous)

**Section 4 First Aid Measures**

**INGESTION:** HARMFUL IF SWALLOWED. Call physician or Poison Control Center immediately. Induce vomiting only if advised by appropriate medical personnel. Never give anything by mouth to an unconscious person.

**INHALATION:** MAY BE HARMFUL IF INHALED. CAUSES RESPIRATORY TRACT IRRITATION. Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

**EYE CONTACT:** CAUSES SEVERE EYE IRRITATION. Check for and remove contact lenses. Flush thoroughly with water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get immediate medical attention.

**SKIN ABSORPTION:** MAY CAUSE SKIN IRRITATION. Remove contaminated clothing. Flush thoroughly with mild soap and water. If irritation occurs, get medical attention.

**Section 5 Fire Fighting Measures**

**Suitable Extinguishing Media:** Use any media suitable for extinguishing supporting fire

**Protective Actions for Fire-fighters:** In fire conditions, wear a NIOSH/MSHA-approved self-contained breathing apparatus and full protective gear. Use water spray to keep fire-exposed containers cool.

**Specific Hazards:** During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

**Section 6 Accidental Release Measures**

**Personal Precautions:** Evacuate personnel to safe area. Use proper personal protective equipment as indicated in Section 8. Provide adequate ventilation.

**Environmental Precautions:** Avoid runoff into storm sewers and ditches which lead to waterways.

**Containment and Cleanup:** Sweep or vacuum up and place in a suitable container for proper disposal. Wash spill area with soap and water.

(2012 EMERGENCY RESPONSE GUIDEBOOK, (PHH50-ERG2012), GUIDE # 154)



## Section 7

## Handling &amp; Storage

Page E20 E

**Precautions for Safe Handling:** Read label on container before using. Do not wear contact lenses when working with chemicals. Keep out of reach of children. Avoid contact with eyes, skin and clothing. Do not inhale dusts. Use with adequate ventilation. Avoid ingestion. Wash thoroughly after handling. Remove and wash clothing before reuse.

**Conditions for Safe Storage:** Store in a cool, dry, well-ventilated area away from incompatible substances.

## Section 8

## Exposure Controls / Personal Protection

Exposure Limits:	Chemical Name	ACGIH (TLV)	OSHA (PEL)	NIOSH (REL)
	Copper, dusts and mists, as Cu	TWA: 1 mg/m <sup>3</sup>	TWA: 1 mg/m <sup>3</sup>	TWA: 1 mg/m <sup>3</sup>

**Engineering controls:** Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower and fire extinguishing material. Personnel should wear safety glasses, goggles, or faceshield, lab coat or apron, appropriate protective gloves. Use adequate ventilation to keep airborne concentrations low.

**Respiratory protection:** None should be needed in normal laboratory handling at room temperatures. If dusty conditions prevail, work in fume hood or wear a NIOSH/MSHA-approved respirator.

## Section 9

## Physical &amp; Chemical Properties

<b>Appearance:</b> Yellow-brown, crystalline solid	<b>Evaporation rate ( = 1):</b> Not applicable	<b>Partition coefficient:</b> Data not available
<b>Odor:</b> Odorless	<b>Flammability (solid/gas):</b> Not applicable	<b>Auto-ignition temperature:</b> Data not available
<b>Odor threshold:</b> Data not available	<b>Explosion limits: Lower / Upper:</b> Not applicable	<b>Decomposition temperature:</b> Data not available
<b>pH:</b> Data not available	<b>Vapor pressure (mm Hg):</b> Data not available	<b>Viscosity:</b> Data not available.
<b>Melting / Freezing point:</b> 100°C (230°F)	<b>Vapor density (Air = 1):</b> Data not available	<b>Molecular formula:</b> CuCl <sub>2</sub>
<b>Boiling point:</b> Decomposes	<b>Relative density (Specific gravity):</b> 2.54	<b>Molecular weight:</b> 134.45
<b>Flash point:</b> Non-flammable	<b>Solubility(ies):</b> Soluble in water	

## Section 10

## Stability &amp; Reactivity

**Chemical stability:** Stable

**Hazardous polymerization:** Will not occur.

**Conditions to avoid:** Hygroscopic material. Avoid exposure or contact to extreme temperatures and incompatible materials.

**Incompatible materials:** Potassium, sodium, hydrazine, nitromethane, aluminum, strong oxidizers, acetylene and sodium hypobromite.

**Hazardous decomposition products:** Copper oxides and hydrogen chloride.

## Section 11

## Toxicological Information

**Acute toxicity:** Oral-rat LD50: 290 mg/kg ; Oral-human LD50: 200 mg/kg

**Skin corrosion/irritation:** Data not available

**Serious eye damage/irritation:** Data not available

**Respiratory or skin sensitization:** Data not available

**Germ cell mutagenicity:** Data not available

**Carcinogenicity:** Data not available

**NTP:** No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

**IARC:** No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

**OSHA:** No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**Reproductive toxicity:** Data not available

**STOT-single exposure:** Data not available

**STOT-repeated exposure:** Data not available

**Aspiration hazard:** Data not available

**Potential health effects:**

**Inhalation:** Symptoms of over-exposure may include irritation, sore throat, shortness of breath, ulceration and perforation of the nasal septum and upper respiratory tract irritation.

**Ingestion:** May cause gastrointestinal irritation with symptoms such as nausea, vomiting and diarrhea.

**Skin:** Contact with skin may cause symptoms of itching, redness, blistering and possible scarring, dermatitis.

**Eyes:** Contact with eyes may cause redness, pain and blurred vision. Prolonged contact may cause corneal injury.

**Signs and symptoms of exposure:** Copper salts impart a metallic taste in the mouth. Damage to the kidneys may occur in person's with Wilson's disease. High concentrations in contact with skin may result in burns. Chronic exposure may also lead to liver damage, anemia and other blood cell abnormalities.

**Additional information:** RTECS #: GL7030000

## Section 12

## Ecological Information

**Toxicity to fish:** Bluegill LC50: 0.9 mg/L/96 hours

**Toxicity to daphnia and other aquatic invertebrates:** Daphnia magna EC50: 0.04 mg/L/48 hours

**Toxicity to algae:** Selenastrum EC50: 0.12 mg/L/96 hours

**Persistence and degradability:** No data available

**Bioaccumulative potential:** No data available

**Mobility in soil:** No data available

**PBT and vPvB assessment:** No data available

**Other adverse effects:** An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

## Section 13

## Disposal Considerations

These disposal guidelines are intended for the disposal of catalog-size quantities only. Federal regulations may apply to empty container. State and/or local regulations may be different. Dispose of in accordance with all local, state and federal regulations or contract with a licensed chemical disposal agency.

## Section 14

## Transport Information

**UN/NA number:** UN2802

**Shipping name:** Copper chloride

**Hazard class:** 8

**Packing group:** III

**Reportable Quantity:** 10 lbs (4.54 kg)

**Marine pollutant:** Yes

**Exceptions:** Limited quantity equal to or less than 4.539 Kg ; Reportable quantity equal to or more than 4.54 Kg

**2012 ERG Guide #** 154

## Section 15

## Regulatory Information

A chemical is considered to be listed if the CAS number for the anhydrous form is on the Inventory list.

Component	TSCA	CERLCA (RQ)	RCRA code	DSL	NDSL	WHMIS Classification
Cupric chloride (anhydrous)	Listed	10 lbs (4.54 kg)	Not listed	Listed	Not listed	D2A ; D2B

## Section 16

## Additional Information

The information contained herein is furnished without warranty of any kind. Employers should use this information only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees. NTP: National Toxicology Program, IARC: International Agency for Research on Cancer, OSHA: Occupational Safety and Health Administration, STOT: Specific Target Organ Toxicity, SE: Single Exposure, RE: Repeated Exposure, ERG: Emergency Response Guidebook.

Revision Date: August 28, 2013

Supersedes: February 4, 2013

# FLINN SCIENTIFIC, INC.

## Safety Data Sheet (SDS)

SDS #: 281.00

Revision Date: December 31, 2013

### SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

#### Copper(II) Chloride, Anhydrous

Flinn Scientific, Inc. P.O. Box 219 Batavia, IL 60510 (800) 452-1261

CHEMTREC Emergency Phone Number: (800) 424-9300

Signal Word **WARNING**

Pictograms



### SECTION 2 — HAZARDS IDENTIFICATION

Hazard class: Acute toxicity, oral (Category 4). Harmful if swallowed (H302). Do not eat, drink or smoke when using this product (P270).

Hazard class: Skin and serious eye damage, corrosion or irritation (Category 2, 2A). Causes skin and serious eye irritation (H315+H319).

Hazard class: Specific target organ toxicity, single exposure; Respiratory tract irritation (Category 3). May cause respiratory irritation (H335). Avoid breathing dust or fumes (P261).

### SECTION 3 — COMPOSITION, INFORMATION ON INGREDIENTS

Component Name	CAS Number	Formula	Formula Weight	Concentration
Copper(II) chloride, anhydrous	7447-39-4	CuCl <sub>2</sub>	134.45	
Synonyms: Cupric chloride, Copper dichloride				

### SECTION 4 — FIRST AID MEASURES

**If exposed or concerned:** Get medical advice or attention (P308+P313).

**If inhaled:** Remove victim to fresh air in a position comfortable for breathing (P304+P340).

**If in eyes:** Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do so. Continue rinsing (P305+P351+P338). If eye irritation persists: Get medical advice or attention (P337+P313).

**If on skin:** Rinse cautiously with water for several minutes (P351).

**If swallowed:** Rinse mouth. Call a POISON CENTER or physician if you feel unwell.

### SECTION 5 — FIRE FIGHTING MEASURES

Nonflammable solid.

When heated to decomposition, may emit toxic fumes.

**In case of fire:** Use tri-class dry chemical fire extinguisher.

**NFPA CODE**  
None  
established

### SECTION 6 — ACCIDENTAL RELEASE MEASURES

Sweep up the spill, place in a sealed bag or container, and dispose. Ventilate area and wash spill site after material pickup is complete. See Sections 8 and 13 for further information.

---

**SECTION 7 — HANDLING AND STORAGE**

---

Flinn Suggested Chemical Storage Pattern: Inorganic #2. Store with acetates, halides, sulfates, sulfites, thiosulfates, and phosphates.

Deliquescent. Store in a cool, dry place within a Flinn Chem-Saf™ bag. Keep container tightly closed (P233).

---

**SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION**

---

Wear protective gloves, protective clothing, and eye protection (P280). Wash thoroughly after handling (P264).

---

**SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES**

---

Olive-tan powder or crystals. Slight vanilla odor.

Melting point: 620 °C

Soluble: Water and alcohol

Specific gravity: 3.4

---

**SECTION 10 — STABILITY AND REACTIVITY**

---

Avoid contact with moisture and alkali metals.

Shelf life: Poor, deliquescent. See Section 7 for further information.

---

**SECTION 11 — TOXICOLOGICAL INFORMATION**

---

Acute effects: Toxic, irritant, and gastrointestinal disturbances.

ORL-RAT LD<sub>50</sub>: 584 mg/kg

Chronic effects: N.A.

IHL-RAT LC<sub>50</sub>: N.A.

Target organs: N.A.

SKN-RBT LD<sub>50</sub>: N.A.

N.A. = Not available, not all health aspects of this substance have been fully investigated.

---

**SECTION 12 — ECOLOGICAL INFORMATION**

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Data not yet available.

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**SECTION 13 — DISPOSAL CONSIDERATIONS**

---

Please review all federal, state and local regulations that may apply before proceeding.

Flinn Suggested Disposal Method #26a is one option.

---

**SECTION 14 — TRANSPORT INFORMATION**

---

Shipping name: Copper Chloride. Hazard class: 8, Corrosive. UN number: UN2802.

N/A = Not applicable

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**SECTION 15 — REGULATORY INFORMATION**

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TSCA-listed, EINECS-listed (231-210-2).

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**SECTION 16 — OTHER INFORMATION**

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This Safety Data Sheet (SDS) is for guidance and is based upon information and tests believed to be reliable. Flinn Scientific, Inc. makes no guarantee of the accuracy or completeness of the data and shall not be liable for any damages relating thereto. The data is offered solely for your consideration, investigation, and verification. The data should not be confused with local, state, federal or insurance mandates, regulations, or requirements and CONSTITUTE NO WARRANTY. Any use of this data and information must be determined by the science instructor to be in accordance with applicable local, state or federal laws and regulations. The conditions or methods of handling, storage, use and disposal of the product(s) described are beyond the control of Flinn Scientific, Inc. and may be beyond our knowledge. FOR THIS AND OTHER REASONS, WE DO NOT ASSUME RESPONSIBILITY AND EXPRESSLY DISCLAIM LIABILITY FOR LOSS, DAMAGE OR EXPENSE ARISING OUT OF OR IN ANY WAY CONNECTED WITH THE HANDLING, STORAGE, USE OR DISPOSAL OF THIS PRODUCT(S).

Consult your copy of the *Flinn Science Catalog/Reference Manual* for additional information about laboratory chemicals.

# FLINN SCIENTIFIC, INC.

## Safety Data Sheet (SDS)

SDS #: 282.00

Revision Date: December 7, 2015

### SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

#### Copper(II) Nitrate

Flinn Scientific, Inc. P.O. Box 219, Batavia, IL 60510 (800) 452-1261

CHEMTREC Emergency Phone Number: (800) 424-9300

Signal Word **DANGER**

Pictograms



### SECTION 2 — HAZARDS IDENTIFICATION

Hazard class: Oxidizing solids (Category 2). May intensify fire; oxidizer (H272). Keep away from heat, sparks, open flames, and hot surfaces. No smoking (P210).

Hazard class: Acute toxicity, oral (Category 4). Harmful if swallowed (H302). Do not eat, drink or smoke when using this product (P270).

Hazard class: Skin corrosion or irritation (Category 2). Causes skin irritation (H315).

Hazard class: Serious eye damage or irritation (Category 2A). Causes serious eye irritation (H318).

### SECTION 3 — COMPOSITION, INFORMATION ON INGREDIENTS

Component Name	CAS Number	Formula	Formula Weight	Concentration
Copper(II) nitrate trihydrate	10031-43-3	Cu(NO <sub>3</sub> ) <sub>2</sub> ·3H <sub>2</sub> O	241.60	
Synonym: Cupric nitrate				

### SECTION 4 — FIRST AID MEASURES

Call a POISON CENTER or physician if you feel unwell.

**If inhaled:** Remove victim to fresh air and keep at rest in a position comfortable for breathing.

**If in eyes:** Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do so. Continue rinsing (P305+P351+P338). Immediately call a POISON CENTER or physician (P310).

**If on skin:** Wash with plenty of water (P302+P352). **If skin irritation occurs:** Get medical advice or attention (P332+P313).

**If swallowed:** Rinse mouth. Call a POISON CENTER or physician if you feel unwell (P302+P301+P312).

### SECTION 5 — FIRE FIGHTING MEASURES

Nonflammable, noncombustible solid.

Strong oxidizer. Avoid contact with combustible and organic materials. When heated to decomposition, may emit toxic fumes.

**In case of fire:** Use a tri-class dry chemical fire extinguisher. Take any precautions to avoid mixing with combustibles (P221+P370+P378).

**NFPA Code**  
None  
established

### SECTION 6 — ACCIDENTAL RELEASE MEASURES

Sweep up the spill, place in a sealed bag or container, and dispose. Ventilate area and wash spill site after material pickup is complete. See Sections 8 and 13 for further information.

---

**SECTION 7 — HANDLING AND STORAGE**

---

Flinn Suggested Chemical Storage Pattern: Inorganic #3. Store with amides, nitrates, nitrites and azides. Deliquescent. Store in a cool, dry place within a Flinn Chem-Saf™ bag. Keep and store away from clothing and combustible materials (P220). Take any precautions to avoid mixing with combustibles (P221).

---

**SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION**

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Wear protective gloves, protective clothing, and eye protection (P280). Wash hands thoroughly after handling (P264). OSHA PEL 1 mg/m3. ACGIH TWA 1 mg/m3

---

**SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES**

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Blue crystals. Odorless.  
Soluble: Water and alcohol

Boiling point: 170 °C (decomposes)  
Melting point: 114 °C  
Specific gravity: 2.32

---

**SECTION 10 — STABILITY AND REACTIVITY**

---

Avoid contact with organic materials, reducing agents, heat, or moisture. Avoid dust. Incompatible with easily oxidizable materials. Shelf life: Poor, deliquescent. See Section 7 for further information.

---

**SECTION 11 — TOXICOLOGICAL INFORMATION**

---

Acute effects: Corrosive. Symptoms may include stinging, tearing, redness, swelling and blurred vision. Skin irritation with redness and pain.  
Chronic effects: N.A.  
Target organs: N.A.

ORL-RAT LD<sub>50</sub>: 940 mg/kg  
IHL-RAT LC<sub>50</sub>: N.A.  
SKN-RBT LD<sub>50</sub>: N.A.

N.A. = Not available, not all health aspects of this substance have been fully investigated.

---

**SECTION 12 — ECOLOGICAL INFORMATION**

---

Data not yet available.

---

**SECTION 13 — DISPOSAL CONSIDERATIONS**

---

Please review all federal, state and local regulations that may apply before proceeding. Flinn Suggested Disposal Method #26a is one option.

---

**SECTION 14 — TRANSPORT INFORMATION**

---

UN number: UN1477. Shipping name: Nitrates, Inorganic, N.O.S. (CUPRIC NITRATE) Hazard class: 5.1, Oxidizer. Packing Group III  
N/A = Not applicable

---

**SECTION 15 — REGULATORY INFORMATION**

---

TSCA-listed, EINECS-listed (221-838-5), RCRA code D001.

---

**SECTION 16 — OTHER INFORMATION**

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Consult your copy of the *Flinn Science Catalog/Reference Manual* for additional information about laboratory chemicals.

Revision Date: December 7, 2015

# FLINN SCIENTIFIC, INC.

## Safety Data Sheet (SDS)

SDS #: 283.00

Revision Date: March 27, 2014

### SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

#### Copper(II) Nitrate Solution

Flinn Scientific, Inc. P.O. Box 219, Batavia, IL 60510 (800) 452-1261

CHEMTREC Emergency Phone Number: (800) 424-9300

Signal Word **WARNING**

Pictograms

### SECTION 2 — HAZARDS IDENTIFICATION

Hazard class: Skin corrosion or irritation (Category 3). Causes mild skin irritation (H316).

Hazard class: Serious eye damage or irritation (Category 2B). Causes eye irritation (H320).

### SECTION 3 — COMPOSITION, INFORMATION ON INGREDIENTS

Component Name	CAS Number	Formula	Formula Weight	Concentration
Copper(II) nitrate trihydrate	10031-43-3	$\text{Cu}(\text{NO}_3)_2 \cdot 3\text{H}_2\text{O}$	241.60	<1-25%
Water	7732-18-5	$\text{H}_2\text{O}$	18.00	75-99%

### SECTION 4 — FIRST AID MEASURES

Call a POISON CENTER or physician if you feel unwell.

**If inhaled:** Remove victim to fresh air and keep at rest in a position comfortable for breathing.

**If in eyes:** Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do so. Continue rinsing (P305+P351+P338). **If eye irritation persists:** Get medical advice or attention (P337+P313).

**If on skin:** Wash with plenty of water. **If skin irritation occurs:** Get medical advice or attention (P332+P313).

**If swallowed:** Rinse mouth. Call a POISON CENTER or physician if you feel unwell.

### SECTION 5 — FIRE FIGHTING MEASURES

Nonflammable, noncombustible solution.

**In case of fire:** Use a tri-class dry chemical fire extinguisher.

**NFPA CODE**  
None  
established

### SECTION 6 — ACCIDENTAL RELEASE MEASURES

Ventilate area. Contain the spill with sand or absorbent material and deposit in a sealed bag or container. See Sections 8 and 13 for further information.

---

**SECTION 7 — HANDLING AND STORAGE**

---

Flinn Suggested Chemical Storage Pattern: Inorganic #3. Store with amides, nitrates, nitrites and azides.

---

**SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION**

---

Wear protective gloves, protective clothing, and eye protection. Wash hands thoroughly after handling (P264).

---

**SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES**

---

Clear blue liquid. Odorless.

---

**SECTION 10 — STABILITY AND REACTIVITY**

---

Avoid contact with strong reducing agents.

Shelf life: Good, if stored properly.

---

**SECTION 11 — TOXICOLOGICAL INFORMATION**

---

Acute effects: Corrosive.

ORL-RAT LD<sub>50</sub>: 940 mg/kg as cupric nitrate

Chronic effects: N.A.

IHL-RAT LC<sub>50</sub>: N.A.

Target organs: N.A.

SKN-RBT LD<sub>50</sub>: N.A.

N.A. = Not available, not all health aspects of this substance have been fully investigated.

---

**SECTION 12 — ECOLOGICAL INFORMATION**

---

Data not yet available.

---

**SECTION 13 — DISPOSAL CONSIDERATIONS**

---

Please review all federal, state and local regulations that may apply before proceeding.

Flinn Suggested Disposal Method #26b is one option.

---

**SECTION 14 — TRANSPORT INFORMATION**

---

Shipping name: Not regulated. Hazard class: N/A. UN number: N/A.

N/A = Not applicable

---

**SECTION 15 — REGULATORY INFORMATION**

---

Not listed.

---

**SECTION 16 — OTHER INFORMATION**

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Consult your copy of the *Flinn Science Catalog/Reference Manual* for additional information about laboratory chemicals.

Revision Date: March 27, 2014

## Section 1 Chemical Product and Company Identification

Page E1 of E2



**Aldon  
Corporation**

221 Rochester Street  
Avon, NY 14414  
(585) 226-6177

**CHEMTREC 24 Hour Emergency  
Phone Number (800) 424-9300**  
For laboratory use only.  
Not for drug, food or household use.

**Product** COPPER(II) NITRATE, 0.1 MOLAR SOLUTION

**Synonyms** Cupric Nitrate, Water Solution

## Section 2 Hazards Identification

**Signal word:** WARNING

**Pictograms:** GHS07 / GHS09

**Target organs:** Liver

**GHS Classification:**

Acute toxicity, oral (Category 5)

Skin irritation (Category 2)

Eye irritation (Category 2B)

Aquatic acute (Category 1)

Aquatic chronic (Category 1)

**GHS Label information: Hazard statement:**

H303: May be harmful if swallowed.

H315: Causes skin irritation.

H320: Causes eye irritation.

H410: Very toxic to aquatic life with long lasting effects.

**Precautionary statement:**

P264: Wash hands thoroughly after handling.

P273: Avoid release to the environment.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

P301+P312: IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell.

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

P337+P313: If eye irritation persists: Get medical attention.

P302+P352: IF ON SKIN: Wash with plenty of water and soap.

P332+P313: If skin irritation occurs: Get medical attention.

P362+P364: Take off contaminated clothing and wash it before reuse.

P391: Collect spillage.

P501: Dispose of contents/container to a licensed chemical disposal agency in accordance with local/regional/national regulations.

Ca Prop 65 - This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm.

## Section 3 Composition / Information on Ingredients

Chemical Name	CAS #	%	EINECS
Water	7732-18-5	97.584%	231-791-2
Cupric nitrate, trihydrate	10031-43-3	2.416%	221-838-5 [anhydrous]

## Section 4 First Aid Measures

**INGESTION:** MAY BE HARMFUL IF SWALLOWED. Call physician or Poison Control Center immediately. Induce vomiting only if advised by appropriate medical personnel. Never give anything by mouth to an unconscious person.

**INHALATION:** MAY CAUSE RESPIRATORY TRACT IRRITATION. Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

**EYE CONTACT:** CAUSES EYE IRRITATION. Check for and remove contact lenses. Flush thoroughly with water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get immediate medical attention.

**SKIN ABSORPTION:** MAY CAUSE SKIN IRRITATION. Remove contaminated clothing. Flush thoroughly with mild soap and water. If irritation occurs, get medical attention.

## Section 5 Fire Fighting Measures

**Suitable Extinguishing Media:** Use any media suitable for extinguishing supporting fire.

**Protective Actions for Fire-fighters:** In fire conditions, wear a NIOSH/MSHA-approved self-contained breathing apparatus and full protective gear. Use water spray to keep fire-exposed containers cool.

**Specific Hazards:** In fire conditions, water may evaporate from this solution which may cause hazardous decomposition products to be formed as dust or fume.

## Section 6 Accidental Release Measures

**Personal Precautions:** Evacuate personnel to safe area. Use proper personal protective equipment as indicated in Section 8. Provide adequate ventilation.

**Environmental Precautions:** Avoid runoff into storm sewers and ditches which lead to waterways.

**Containment and Cleanup:** Absorb with inert dry material, sweep or vacuum up and place in a suitable container for proper disposal. Wash spill area with soap and water.



**Precautions for Safe Handling:** Read label on container before using. Do not wear contact lenses when working with chemicals. Keep out of reach of children. Avoid contact with eyes, skin and clothing. Do not inhale vapors, spray or mist. Use with adequate ventilation. Avoid ingestion. Wash thoroughly after handling. Remove and wash clothing before reuse.

**Conditions for Safe Storage:** Store in a cool, well-ventilated area away from incompatible substances.

## Section 8 Exposure Controls / Personal Protection

Exposure Limits:	Chemical Name	ACGIH (TLV)	OSHA (PEL)	NIOSH (REL)
	Copper, dusts & mists, as Cu	TWA: 1 mg/m <sup>3</sup>	TWA: 1 mg/m <sup>3</sup>	TWA: 1 mg/m <sup>3</sup>

**Engineering controls:** Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower and fire extinguishing material. Personnel should wear safety glasses, goggles, or faceshield, lab coat or apron, appropriate protective gloves. Use adequate ventilation to keep airborne concentrations low.

**Respiratory protection:** None should be needed in normal laboratory handling at room temperatures. If misty conditions prevail, work in fume hood or wear a NIOSH/MSHA-approved respirator.

## Section 9 Physical &amp; Chemical Properties

<b>Appearance:</b> Clear, colorless liquid. <b>Odor:</b> No odor. <b>Odor threshold:</b> Data not available. <b>pH:</b> Data not available. <b>Melting / Freezing point:</b> Approximately 0°C (32°F) (water) <b>Boiling point:</b> Approximately 100°C (212°F) (water) <b>Flash point:</b> Data not available	<b>Evaporation rate ( Water = 1):</b> <1 <b>Flammability (solid/gas):</b> Data not available. <b>Explosion limits: Lower / Upper:</b> Data not available <b>Vapor pressure (mm Hg):</b> 14 (water) <b>Vapor density (Air = 1):</b> 0.7 (water) <b>Relative density (Specific gravity):</b> Approximately 1.0 (water) <b>Solubility(ies):</b> Complete in water.	<b>Partition coefficient:</b> Data not available <b>Auto-ignition temperature:</b> Data not available <b>Decomposition temperature:</b> Data not available. <b>Viscosity:</b> Data not available. <b>Molecular formula:</b> Mixture <b>Molecular weight:</b> Mixture
--	---	---

## Section 10 Stability &amp; Reactivity

**Chemical stability:** Stable **Hazardous polymerization:** Will not occur.

**Conditions to avoid:** Excessive temperatures which cause evaporation.

**Incompatible materials:** Strong oxidizing agents, aluminum cyanides, esters, sodium hypophosphite, stannous chloride and thiocyanates.

**Hazardous decomposition products:** Nitrogen oxides, copper oxides and copper dust.

## Section 11 Toxicological Information

**Acute toxicity:** Oral-rat LD50: 940 mg/kg [Cupric nitrate]

**Skin corrosion/irritation:** Data not available

**Serious eye damage/irritation:** Data not available

**Respiratory or skin sensitization:** Data not available

**Germ cell mutagenicity:** Data not available

**Carcinogenicity:** Data not available

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**Reproductive toxicity:** Data not available

**STOT-single exposure:** Data not available

**STOT-repeated exposure:** Data not available

**Aspiration hazard:** Data not available

**Potential health effects:**

Inhalation: Harmful if inhaled.

Ingestion: Harmful if swallowed.

Skin: Contact with skin causes irritation and/or burns.

Eyes: Contact with eyes causes irritation and/or burns.

**Signs and symptoms of exposure:** Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin. Exercise appropriate procedures to minimize potential hazards.

**Additional information:** RTECS #: GL7875000 [Cupric nitrate]

## Section 12 Ecological Information

**Toxicity to fish:** No data available

**Toxicity to daphnia and other aquatic invertebrates:** No data available

**Toxicity to algae:** No data available

**Persistence and degradability:** No data available

**Bioaccumulative potential:** No data available

**Mobility in soil:** No data available

**PBT and vPvB assessment:** No data available

**Other adverse effects:** An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

## Section 13 Disposal Considerations

These disposal guidelines are intended for the disposal of catalog-size quantities only. Federal regulations may apply to empty container. State and/or local regulations may be different. Dispose of in accordance with all local, state and federal regulations or contract with a licensed chemical disposal agency.

## Section 14 Transport Information (US DOT / CANADA TDG)

**UN/NA number:** Not applicable

**Shipping name:** Not Regulated

**Hazard class:** Not applicable

**Packing group:** Not applicable

**Reportable Quantity:** No

**Marine pollutant:** No

**Exceptions:** Not applicable

**2012 ERG Guide #** Not applicable

## Section 15 Regulatory Information

A chemical is considered to be listed if the CAS number for the anhydrous form is on the Inventory list.

Component	TSCA	CERLCA (RQ)	RCRA code	DSL	NDSL
Cupric nitrate	Listed	100 lbs (45.4 kg)	Not listed	Listed	Not listed

## Section 16 Other Information

The information contained herein is furnished without warranty of any kind. Employers should use this information only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees. NTP: National Toxicology Program, IARC: International Agency for Research on Cancer, OSHA: Occupational Safety and Health Administration, STOT: Specific Target Organ Toxicity, SE: Single Exposure, RE: Repeated Exposure, ERG: Emergency Response Guidebook.

## Section 1 L'identification de produit chimique et de compagnie

Page F1 of F2



**Aldon  
Corporation**

221 Rochester Street  
Avon, NY 14414  
(585) 226-6177

**CHEMTREC 24 Numéros De Téléphone  
De Secours D'Heure (800) 424-9300**  
Pour l'usage de laboratoire seulement.  
Pas pour l'usage de drogue, de nourriture  
ou de ménage.

**Produit** NITRATE CUIVRE(II), SOLUTION DE 0.1 MOLAIRE

**Synonymes** Nitrate cuivrique, solution de l'eau

## Section 2 Identification De Risques

**Mention d'avertissement:** AVERTISSEMENT

**Pictogrammes:** GHS07 / GHS09

**Les organes cibles:** Le foie



**Classification par le GHS:**

Acute toxicity, oral (Catégorie 5)

Skin irritation (Catégorie 2)

Eye irritation (Catégorie 2A)

Aquatic acute (Catégorie 1)

Aquatic chronic (Catégorie 1)

**Renseignements sur l'étiquette GHS: Mention de danger:**

H303: Peut être nocif en cas d'ingestion.

H315: Provoque une irritation cutanée.

H320: Provoque une irritation des yeux.

H410: Très toxique pour les organismes aquatiques, entraîne des effets néfastes à long terme.

**Déclarations de précaution:**

P264: Se laver les mains soigneusement après manipulation.

P273: Éviter le rejet dans l'environnement.

P280: Porter des gants de protection / des vêtements de protection / un équipement de protection des yeux / du visage.

P301+P312: EN CAS D'INGESTION: Appeler un CENTRE ANTIPOISON ou un médecin en cas de malaise.

P305+P351+P338: EN CAS DE CONTACT AVEC LES YEUX: Rincer avec précaution à l'eau pendant plusieurs minutes. Enlever les lentilles de contact si la victime en porte et si elles peuvent être facilement enlevées. Continuer à rincer.

P337+P313: Si l'irritation oculaire persiste: Obtenir des soins médicaux.

P302+P352: EN CAS DE CONTACT AVEC LA PEAU: Laver abondamment à l'eau et du savon.

P332+P313: En cas d'irritation cutanée: Obtenir des soins médicaux.

P362+P364: Enlever les vêtements contaminés et les laver avant réutilisation.

P391: Recueillir le produit répandu.

P501: Éliminer le contenu / récipient dans une agence agréée d'élimination chimique conformément à la réglementation locale / régionale / nationale.

**CA Prop 65** - Ce produit ne contient pas de produits chimiques connus à l'État de Californie pour causer le cancer, des malformations congénitales, ou toute autre atteinte à la reproduction.

## Section 3 Composition / Information Sur Des Ingrédients

Nommé Chimique	# CAS	%	EINECS
Water	7732-18-5	97.584%	231-791-2
Nitrate cuivrique, trihydrate	10031-43-3	2.416%	221-838-5 [anhydre]

## Section 4 Mesures De Premiers Soins

**INGESTION:** PEUT ÊTRE NOCIF EN CAS D'INGESTION. Appeler un médecin ou un centre antipoison immédiatement. Provoquer le vomissement seulement si elle est informée par le personnel compétent médicaux. Ne jamais rien donner par la bouche à une personne inconsciente.

**INHALATION:** PEUT CAUSER UNE IRRITATION DE LA VOIES RESPIRATOIRE. Sortir au grand air. Si elle ne respire pas, pratiquer la respiration artificielle. Si la respiration est difficile, donner de l'oxygène. Obtenir des soins médicaux.

**CONTACT AVEC LES YEUX:** PROVOQUE UNE IRRITATION DES YEUX. Vérifier et enlever les lentilles de contact. Rincer abondamment à l'eau pendant au moins 15 minutes, en soulevant les paupières inférieures et supérieures de temps en temps. Obtenez une attention médicale immédiate.

**ABSORPTION PAR LA PEAU:** PEUT PROVOQUE UNE IRRITATION CUTANÉE. Enlever les vêtements contaminés. Rincer soigneusement avec du savon doux et d'eau. En cas d'irritation, consulter un médecin.

## Section 5 Mesures De Lutte Contre l'Incendie

**Moyens d'extinction:** Utilisez des supports adaptés pour éteindre le feu à l'appui.

**Actions de protection pour les sapeurs-pompiers:** En cas d'incendie, porter un appareil respiratoire NIOSH / MSHA approuvé autonome et un équipement complet de protection. Utiliser un jet d'eau pour maintenir incendie refroidir les conteneurs exposés.

**Dangers spécifiques:** En cas de feu, de l'eau peut s'évaporer à partir de cette solution, qui peut causer les produits dangereux de décomposition à être formée comme poussière ou vapeur.

## Section 6 Mesures De Déchargement Accidentel

**Précautions personnelles:** Évacuer le personnel vers la zone sûre. Utiliser un équipement de protection personnelle comme indiqué dans la Section 8. Assurer une ventilation adéquate.

**Précautions environnementales:** Éviter tout ruissellement vers les égouts pluviaux et les fossés qui aboutissent aux voies navigables.

**Confinement et de nettoyage:** Absorber avec un matériau inerte, balayer à sec ou sous vide et placer dans un récipient approprié pour l'élimination. Laver la zone de déversement avec du savon et de l'eau.

**Précautions pour la manutention en toute sécurité:** Lire l'étiquette sur le contenant avant d'utiliser. Ne pas porter de lentilles cornéennes lorsque vous travaillez avec des produits chimiques. Tenir hors de portée des enfants. Éviter tout contact avec les yeux, la peau et les vêtements. Ne pas inhaler les vapeurs, les embruns ou le brouillard. Utiliser avec une ventilation adéquate. Éviter l'ingestion. Bien se laver après la manipulation. Retirer et laver les vêtements avant de les réutiliser.

**Conditions de stockage:** Stocker dans un endroit frais et bien aéré, loin des substances incompatibles.

## Section 8 Commandes D'Exposition / Protection Personnelle

Limites d'exposition:	Nommé Chimique	ACGIH (TLV)	OSHA (PEL)	NIOSH (REL)
	Cuivre, poussières et brumes, comme Cu	TWA: 1 mg/m <sup>3</sup>	TWA: 1 mg/m <sup>3</sup>	TWA: 1 mg/m <sup>3</sup>

**Contrôles d'ingénierie:** Les installations d'entreposage ou d'utilisation de ce matériel doit être équipé d'une douche oculaire et une douche de sécurité et le matériel d'extinction d'incendie. Le personnel doit porter des lunettes de sécurité, des lunettes, ou un écran facial, une blouse de laboratoire ou tablier, des gants protecteurs appropriés. Utiliser une ventilation adéquate pour maintenir les concentrations atmosphériques faible.

**Protection respiratoire:** Aucun ne devrait être nécessaire dans le laboratoire normal manipulant aux températures ambiantes. Si les conditions brumeuses prévaloir, travailler dans la hotte ou de porter un masque respiratoire approuvé NIOSH / MSHA.

## Section 9 Propriétés Physiques Et Chimiques

<b>Apparence:</b> Clair, liquide incolore.	<b>Taux d'évaporation (Eau = 1):</b> <1	<b>Coefficient de partage:</b> Données non disponibles
<b>Odeur:</b> Aucun odeur.	<b>Inflammabilité (solide / gaz):</b> Données non disponibles.	<b>Auto-inflammation:</b> Données non disponibles
<b>Seuil de l'odeur:</b> Données non disponibles.	<b>Limites d'explosivité: Bas / Max:</b> Données non disponibles	<b>Température de décomposition:</b> Données non disponibles.
<b>pH:</b> Données non disponibles.	<b>Pression de vapeur (mm Hg):</b> 14 (eau)	<b>Viscosité:</b> Données non disponibles.
<b>Point de fusion / congélation:</b> Environ 0°C (32°F) (eau)	<b>Densité de vapeur (Air = 1):</b> 0.7 (eau)	<b>Formule moléculaire:</b> Mélange
<b>Point d'ébullition:</b> Environ 100°C (212°F) (eau)	<b>Densité relative (gravité spécifique):</b> Environ 1.0 (eau)	<b>Poids moléculaire:</b> Mélange
<b>Point d'éclair:</b> Données non disponibles	<b>Solubilité (s):</b> Complet dans l'eau.	

## Section 10 Stabilité Et Réactivité

**Stabilité chimique:** Stable

**Polymérisation dangereuse:** N'aura pas lieu.

**Conditions à éviter:** Les températures excessives qui causent l'évaporation.

**Matières incompatibles:** Les agents comburante fortes, cyanures en aluminium, esters, hypophosphite de sodium, chlorure stanneux et sulfocyanates.

**Produits dangereux de décomposition:** L'oxydes d'azote, l'oxydes de cuivre, les poussières de cuivre.

## Section 11 L'Information Toxicologique

**Toxicité aiguë:** Oral-rat LD50: 940 mg/kg [Nitrate cuivrique]

**La corrosion de la peau et l'irritation:** Données non disponibles

**Des lésions oculaires graves / irritation:** Données non disponibles

**Respiratoire ou sensibilisation de la peau:** Données non disponibles

**Mutagenicité des cellules germinales:** Données non disponibles

**Cancérogène:** Données non disponibles

NTP: Aucun composant de ce produit présent à des niveaux supérieurs ou égaux à 0,1% n'a été identifié comme cancérogène reconnu ou présumé par NTP.

IARC: Aucun composant de ce produit présent à des niveaux supérieurs ou égaux à 0,1% n'a été identifié comme cancérogène probable, possible ou confirmé par IARC.

OSHA: Aucun composant de ce produit présent à des niveaux supérieurs ou égaux à 0,1% n'a été identifié comme cancérogène ni comme cancérogène possible par OSHA.

**Reproductive toxicity:** Données non disponibles

**STOT-exposition unique:** Données non disponibles

**STOT-une exposition répétée:** Données non disponibles

**Risque d'aspiration:** Données non disponibles

**Effets d'une surexposition:**

Inhalation: Nocif en cas d'inhalation.

Ingestion: Nocif en cas d'ingestion.

Peau: Contact avec la peau provoque une irritation et / ou des brûlures.

Yeux: Contact avec les yeux provoque une irritation et / ou des brûlures.

**Les signes et les symptômes de l'exposition:** Le produit est extrêmement destructeur pour le tissu des muqueuses et des voies respiratoires, des yeux et de la peau.

Procédures appropriées d'exercice pour réduire au minimum des risques

**Informations complémentaires: RTECS #:** GL7875000 [Nitrate cuivrique]

## Section 12 L'Information Écologique

**Toxicité pour les poissons:** Pas de données disponible

**Toxicité pour les daphnies et autres invertébrés aquatiques:** Pas de données disponible

**Toxicité pour les algues:** Pas de données disponible

**Persistance et dégradabilité:** Pas de données disponible

**Potentiel de bioaccumulation:** Pas de données disponible

**Mobilité dans le sol:** Pas de données disponibles

**Évaluation PBT et vPvB:** Pas de données disponibles

**Autres effets indésirables:** Un danger pour l'environnement ne peut pas être exclu dans l'éventualité d'une manipulation ou d'élimination.

## Section 13 Considérations De Disposition

Ces lignes directrices sont destinées à l'élimination de la disposition d'un catalogue de taille seules les quantités. Les règlements fédéraux peuvent s'appliquer aux contenants vides. Des réglementations nationales et / ou local peut être différent. Éliminer conformément à toutes les réglementations locales, provinciales et fédérales ou d'un contrat avec une agence élimination des produits chimiques sous licence.

## Section 14 L'Information De Transport (US DOT / CANADA TMD)

**Numéro UN / NA:** Non applicable

**Nom d'expédition:** Non réglé

**Classe de danger:** Non applicable

**Groupe d'emballage:** Non applicable

**Quantité à déclarer:** Non

**Polluant marin:** Non

**Exceptions:** Non applicable

**2012 ERG Guide #:** Non applicable

## Section 15 L'Information De Normalisation

Un produit chimique est considéré comme inscrit si le numéro CAS pour la forme anhydre est sur la liste d'inventaire.

Composant	TSCA	CERLCA (RQ)	RCRA code	DSL	NDSL
Nitrate cuivrique	Listed	100 lbs (45.4 kg)	Not listed	Listed	Not listed

## Section 16 L'autre Information

Les informations contenues dans ce document sont fournis sans garantie d'aucune sorte. Les employeurs devraient considérer cette information seulement comme complément à d'autres informations recueillies par eux et doivent prendre des décisions indépendantes de la pertinence et l'exhaustivité de l'information de toutes les sources afin d'assurer une utilisation correcte de ces matériaux et de la sécurité et la santé des employés. NTP: National Toxicology Program, IARC: International Agency for Research on Cancer, OSHA: Occupational Safety and Health Administration, STOT: Specific Target Organ Toxicity, SE: Single Exposure, RE: Repeated Exposure, ERG: Emergency Response Guidebook.

**Section 1 Chemical Product and Company Information** Page 1 of 2



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**CHEMTREC 24 Hour Emergency**  
Phone Number (800) 424-9300  
For laboratory use only.  
Not for drug, food or household use.

<b>Product</b>	COPPER(II) NITRATE, TRIHYDRATE
<b>Synonyms</b>	Cupric Nitrate, Trihydrate

**Section 2 Hazards Identification**

**Signal word:** DANGER  
**Pictograms:** GHS03 / GHS07 / GHS09  
**Target organs:** Liver



**GHS Classification:**  
Oxidizing solid (Category 2)  
Acute toxicity, oral (Category 4)  
Skin irritation (Category 2)  
Eye irritation (Category 2A)  
Aquatic acute (Category 1)  
Aquatic chronic (Category 1)

**GHS Label information: Hazard statement:**  
H272: May intensify fire; oxidizer.  
H302: Harmful if swallowed.  
H315: Causes skin irritation.  
H319: Causes serious eye irritation.  
H410: Very toxic to aquatic life with long lasting effects.

**Precautionary statement:**  
P210: Keep away from heat/sparks/open flames/hot surfaces. No smoking.  
P220: Keep away from clothing/incompatible/combustible materials.  
P221: Take any precaution to avoid mixing with combustibles and reducing agents.  
P264: Wash hands thoroughly after handling.  
P270: Do not eat, drink or smoke when using this product.  
P273: Avoid release to the environment.  
P280: Wear protective gloves/protective clothing/eye protection/face protection.  
P301+P330+P312: IF SWALLOWED: Rinse mouth. Call a POISON CENTER or doctor if you feel unwell.  
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P337+P313: If eye irritation persists: Get medical attention.  
P302+P352: IF ON SKIN: Wash with plenty of water and soap.  
P332+P313: If skin irritation occurs: Get medical attention.  
P362+P364: Take off contaminated clothing and wash it before reuse.  
P370+P378: In case of fire: Use dry chemical, alcohol foam, carbon dioxide or water spray to extinguish.  
P391: Collect spillage.  
P501: Dispose of contents/container to a licensed chemical disposal agency in accordance with local/regional/national regulations.

Ca Prop 65 - This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm.

**Section 3 Composition / Information on Ingredients**

Chemical Name	CAS #	%	EINECS
Cupric nitrate	10031-43-3	100%	221-838-5 [anhydrous]

**Section 4 First Aid Measures**

**INGESTION:** HARMFUL IF SWALLOWED. Call physician or Poison Control Center immediately. Induce vomiting only if advised by appropriate medical personnel. Never give anything by mouth to an unconscious person.

**INHALATION:** HARMFUL IF INHALED. CAUSES RESPIRATORY TRACT IRRITATION. Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

**EYE CONTACT:** CAUSES SERIOUS EYE IRRITATION. Check for and remove contact lenses. Flush thoroughly with water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get immediate medical attention.

**SKIN ABSORPTION:** CAUSES SKIN IRRITATION. Remove contaminated clothing. Flush thoroughly with mild soap and water. If irritation occurs, get medical attention.

**Section 5 Fire Fighting Measures**

**Suitable Extinguishing Media:** Use any media suitable for extinguishing supporting fire.

**Protective Actions for Fire-fighters:** In fire conditions, wear a NIOSH/MSHA-approved self-contained breathing apparatus and full protective gear. Use water spray to keep fire-exposed containers cool.

**Specific Hazards:** During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Substance is a strong oxidizer which releases oxygen on heating. The oxygen will intensify any fire in the immediate surrounding. Contact with easily oxidizable, combustible substance or powdered metals may cause fire or explosion upon ignition from any source. Strong oxidizers may explode when shocked, or if exposed to heat, flame, or friction. Also may act as initiation source for dust or vapor explosions.

**Section 6 Accidental Release Measures**

**Personal Precautions:** Evacuate personnel to safe area. Use proper personal protective equipment as indicated in Section 8. Provide adequate ventilation.

**Environmental Precautions:** Avoid runoff into storm sewers and ditches which lead to waterways.

**Containment and Cleanup:** Recover for reuse if not contaminated. Remove all sources of ignition. Sweep or vacuum up and place in a suitable container for proper disposal. Wash spill area with soap and water.

**Section 7 Handling & Storage**

**Precautions for Safe Handling:** Read label on container before using. Do not wear contact lenses when working with chemicals. Keep out of reach of children. Avoid contact with eyes, skin and clothing. Do not inhale dusts. Use with adequate ventilation. Avoid ingestion. Wash thoroughly after handling. Remove and wash clothing before reuse.

**Conditions for Safe Storage:** Store in a cool, dry, well-ventilated area away from incompatible substances. Keep away from ignition sources.

**Section 8 Exposure Controls / Personal Protection**

Exposure Limits:	Chemical Name	ACGIH (TLV)	OSHA (PEL)	NIOSH (REL)
	Copper, dusts & mists, as Cu	TWA: 1 mg/m <sup>3</sup>	TWA: 1 mg/m <sup>3</sup>	TWA: 1 mg/m <sup>3</sup>

**Engineering controls:** Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower and fire extinguishing material. Personnel should wear safety glasses, goggles, or faceshield, lab coat or apron, appropriate protective gloves. Use adequate ventilation to keep airborne concentrations low.

**Respiratory protection:** None should be needed in normal laboratory handling at room temperatures. If dusty conditions prevail, work in fume hood or wear a NIOSH/MSHA-approved respirator.

**Section 9 Physical & Chemical Properties**

<b>Appearance:</b> Solid. Blue, deliquescent crystals	<b>Evaporation rate ( = 1):</b> Data not available	<b>Partition coefficient:</b> Data not available
<b>Odor:</b> Slight nitric acid odor.	<b>Flammability (solid/gas):</b> Data not available.	<b>Auto-ignition temperature:</b> Data not available
<b>Odor threshold:</b> Data not available.	<b>Explosion limits: Lower / Upper:</b> Data not available	<b>Decomposition temperature:</b> Data not available.
<b>pH:</b> Data not available.	<b>Vapor pressure (mm Hg):</b> Negligible	<b>Viscosity:</b> Data not available.
<b>Melting / Freezing point:</b> 114.5°C (238°F)	<b>Vapor density (Air = 1):</b> 8.05	<b>Molecular formula:</b> Cu(NO <sub>3</sub> ) <sub>2</sub> ·3H <sub>2</sub> O
<b>Boiling point:</b> Data not available	<b>Relative density (Specific gravity):</b> 2.32	<b>Molecular weight:</b> 241.60
<b>Flash point:</b> Non flammable	<b>Solubility(ies):</b> Soluble in water.	

**Section 10 Stability & Reactivity**

**Chemical stability:** Stable      **Hazardous polymerization:** Will not occur.  
**Conditions to avoid:** Avoid temperatures in excess of 338°F, which cause decomposition.  
**Incompatible materials:** Strong oxidizing agents, aluminum cyanides, esters, sodium hypophosphite, stannous chloride and thiocyanates.  
**Hazardous decomposition products:** Nitrogen oxides, copper oxides and copper dust.

**Section 11 Toxicological Information**

**Acute toxicity:** Oral-rat LD50: 940 mg/kg  
**Skin corrosion/irritation:** Data not available  
**Serious eye damage/irritation:** Data not available  
**Respiratory or skin sensitization:** Data not available  
**Germ cell mutagenicity:** Data not available  
**Carcinogenicity:** Data not available  
 NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.  
 IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.  
 OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.  
**Reproductive toxicity:** Data not available  
**STOT-single exposure:** Data not available  
**STOT-repeated exposure:** Data not available  
**Aspiration hazard:** Data not available  
**Potential health effects:**  
 Inhalation: Harmful if inhaled.  
 Ingestion: Harmful if swallowed.  
 Skin: Contact with skin causes irritation and/or burns.  
 Eyes: Contact with eyes causes irritation and/or burns.  
**Signs and symptoms of exposure:** Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin. Exercise appropriate procedures to minimize potential hazards.  
**Additional information:** RTECS #: GL7875000

**Section 12 Ecological Information**

**Toxicity to fish:** No data available  
**Toxicity to daphnia and other aquatic invertebrates:** No data available  
**Toxicity to algae:** No data available  
**Persistence and degradability:** No data available      **Bioaccumulative potential:** No data available  
**Mobility in soil:** No data available      **PBT and vPvB assessment:** No data available  
**Other adverse effects:** An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

**Section 13 Disposal Considerations**

These disposal guidelines are intended for the disposal of catalog-size quantities only. Federal regulations may apply to empty container. State and/or local regulations may be different. Dispose of in accordance with all local, state and federal regulations or contract with a licensed chemical disposal agency.

**Section 14 Transport Information (US DOT / CANADA / TDG)**

**UN/NA number:** UN1477      **Shipping name:** Nitrates, inorganic, n.o.s., (Cupric nitrate)  
**Hazard class:** 5.1      **Packing group:** III      **Reportable Quantity:** 100 lbs (45.4 kg)      **Marine pollutant:** No  
**Exceptions:** Limited quantity equal to or less than 5 Kg      **2012 ERG Guide #** 140

**Section 15 Regulatory Information**

A chemical is considered to be listed if the CAS number for the anhydrous form is on the Inventory list.

Component	TSCA	CERCLA (RQ)	RCRA code	DSL	NDSL	WHMIS Classification
Cupric nitrate	Listed	100 lbs (45.4 kg)	Not listed	Listed	Not listed	C ; D2B

**Section 16 Additional Information**

The information contained herein is furnished without warranty of any kind. Employers should use this information only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees. NTP: National Toxicology Program, IARC: International Agency for Research on Cancer, OSHA: Occupational Safety and Health Administration, STOT: Specific Target Organ Toxicity, SE: Single Exposure, RE: Repeated Exposure, ERG: Emergency Response Guidebook.



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CHEMTREC 24 Hour Emergency  
Phone Number (800) 424-8300  
For laboratory use only.  
Not for drug, food or household use.

Product: COPPER(II) NITRATE, TRIHYDRATE

Synonyms: Cupric Nitrate, Trihydrate

Signal word: DANGER  
Pictograms: GHS03 / GHS07 / GHS09  
Target organs: Liver



GHS Classification:  
Oxidizing solid (Category 2)  
Acute toxicity, oral (Category 4)  
Skin irritation (Category 2)  
Eye irritation (Category 2A)  
Aquatic acute (Category 1)  
Aquatic chronic (Category 1)

GHS Label information: Hazard statement:  
H272: May intensify fire, oxidizer.  
H302: Harmful if swallowed.  
H315: Causes skin irritation.  
H319: Causes serious eye irritation.  
H410: Very toxic to aquatic life with long lasting effects.

Precautionary statement:  
P210: Keep away from heat/sparks/open flames/hot surfaces. No smoking.  
P220: Keep away from clothing/incompatible/combustible materials.  
P221: Take any precaution to avoid mixing with combustibles and reducing agents.  
P264: Wash hands thoroughly after handling.  
P270: Do not eat, drink or smoke when using this product.  
P273: Avoid release to the environment.  
P280: Wear protective gloves/protective clothing/eye protection/face protection.  
P301+P330+P312: IF SWALLOWED: Rinse mouth. Call a POISON CENTER or doctor if you feel unwell.  
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P337+P313: If eye irritation persists: Get medical attention.  
P302+P352: IF ON SKIN: Wash with plenty of water and soap.  
P332+P313: If skin irritation occurs: Get medical attention.  
P362+P364: Take off contaminated clothing and wash it before reuse.  
P370+P378: In case of fire: Use water to extinguish.  
P391: Collect spillage.  
P601: Dispose of contents/container to a licensed chemical disposal agency in accordance with local/regional/national regulations.

Ca Prop 65 - This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm.

Chemical Name	CAS #	%	EMSCS
Cupric nitrate	10031-43-3	100%	221-838-6 [anhydrous]

**INGESTION: HARMFUL IF SWALLOWED.** Call physician or Poison Control Center immediately. Induce vomiting only if advised by appropriate medical personnel. Never give anything by mouth to an unconscious person.

**INHALATION: HARMFUL IF INHALED. CAUSES RESPIRATORY TRACT IRRITATION.** Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

**EYE CONTACT: CAUSES SERIOUS EYE IRRITATION.** Check for and remove contact lenses. Flush thoroughly with water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get immediate medical attention.

**SKIN ABSORPTION: CAUSES SKIN IRRITATION.** Remove contaminated clothing. Flush thoroughly with mild soap and water. If irritation occurs, get medical attention.

**Suitable Extinguishing Media:** Use water. Do not use dry chemicals or foams. CO<sub>2</sub> or Halon<sup>®</sup> may provide limited control.  
**Protective Actions for Fire-fighters:** In fire conditions, wear a NIOSH/MSHA-approved self-contained breathing apparatus and full protective gear. Use water spray to keep fire-exposed containers cool.  
**Specific Hazards:** During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Substance is a strong oxidizer which releases oxygen on heating. The oxygen will intensify any fire in the immediate surrounding. Contact with easily oxidizable, combustible substance or powdered metals may cause fire or explosion upon ignition from any source. Strong oxidizers may explode when shocked, or if exposed to heat, flame, or friction. Also may act as initiation source for dust or vapor explosions.

**Personal Precautions:** Evacuate personnel to safe area. Use proper personal protective equipment as indicated in Section 8. Provide adequate ventilation.

**Environmental Precautions:** Avoid runoff into storm sewers and ditches which lead to waterways.

**Containment and Cleanup:** Recover for reuse if not contaminated. Remove all sources of ignition. Sweep or vacuum up and place in a suitable container for proper disposal. Wash spill area with soap and water.

**KM00508 COPPER NITRATE TRIHYDRATE**

**Precautions for Safe Handling:** Read label on container before using. Do not wear contact lenses when working with chemicals. Keep out of reach of children. Avoid contact with eyes, skin and clothing. Do not inhale dusts. Use with adequate ventilation. Avoid ingestion. Wash thoroughly after handling. Remove and wash clothing before reuse.

**Conditions for Safe Storage:** Store in a cool, dry, well-ventilated area away from incompatible substances. Keep away from ignition sources.

Exposure Limits:	Chemical Name	ACGMH (TLV)	OSHA (PEL)	NIOSH (REL)
	Copper, dusts & mists, as Cu	TYM: 1 mg/m <sup>3</sup>	TWA: 1 mg/m <sup>3</sup>	TWA: 1 mg/m <sup>3</sup>

**Engineering controls:** Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower and fire extinguishing material. Personnel should wear safety glasses, goggles, or faceshield, lab coat or apron, appropriate protective gloves. Use adequate ventilation to keep airborne concentrations low.

**Respiratory protection:** None should be needed in normal laboratory handling at room temperatures. If dusty conditions prevail, work in fume hood or wear a NIOSH/MSHA-approved respirator.

<b>Appearance:</b> Solid, blue, deliquescent crystals <b>Odor:</b> Slight nitric acid odor. <b>Odor threshold:</b> Data not available. <b>pH:</b> Data not available. <b>Melting / Freezing point:</b> 114.5°C (238°F) <b>Boiling point:</b> Data not available <b>Flash point:</b> Non flammable	<b>Evaporation rate ( = 1):</b> Data not available <b>Flammability (solid/gas):</b> Data not available. <b>Explosion limits: Lower / Upper:</b> Data not available <b>Vapor pressure (mm Hg):</b> Negligible <b>Vapor density (Air = 1):</b> 8.05 <b>Relative density (Specific gravity):</b> 2.32 <b>Solubility(sol):</b> Soluble in water.	<b>Partition coefficient:</b> Data not available <b>Auto-ignition temperature:</b> Data not available <b>Decomposition temperature:</b> Data not available. <b>Viscosity:</b> Data not available. <b>Molecular formula:</b> Cu(NO <sub>3</sub> ) <sub>2</sub> ·3H <sub>2</sub> O <b>Molecular weight:</b> 241.60
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**Chemical stability:** Stable  
**Conditions to avoid:** Avoid temperatures in excess of 338°F, which cause decomposition.  
**Incompatible materials:** Strong oxidizing agents, aluminum cyanides, esters, sodium hypophosphite, stannous chloride and thiocyanates.  
**Hazardous decomposition products:** Nitrogen oxides, copper oxides and copper dust.

**Acute toxicity:** Oral-rat LD50: 940 mg/kg  
**Skin corrosion/irritation:** Data not available  
**Serious eye damage/irritation:** Data not available  
**Respiratory or skin sensitization:** Data not available  
**Germ cell mutagenicity:** Data not available  
**Carcinogenicity:** Data not available  
**NTP:** No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.  
**IARC:** No component of this product present at levels greater than or equal to 0.1% is identified as a probable, possible or confirmed human carcinogen by IARC.  
**OSHA:** No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.  
**Reproductive toxicity:** Data not available  
**STOT-single exposure:** Data not available  
**STOT-repeated exposure:** Data not available  
**Aspiration hazard:** Data not available  
**Potential health effects:**  
**Inhalation:** Harmful if inhaled.  
**Ingestion:** Harmful if swallowed.  
**Skin:** Contact with skin causes irritation and/or burns.  
**Eyes:** Contact with eyes causes irritation and/or burns.  
**Signs and symptoms of exposure:** Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin. Exercise appropriate procedures to minimize potential hazards.  
**Additional information:** RTECS #: GL7875000

**Toxicity to fish:** No data available  
**Toxicity to daphnia and other aquatic invertebrates:** No data available  
**Toxicity to algae:** No data available  
**Persistence and degradability:** No data available  
**Mobility in soil:** No data available  
**Other adverse effects:** An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.  
**Bioaccumulative potential:** No data available  
**PBT and vPvB assessment:** No data available

These disposal guidelines are intended for the disposal of catalog-size quantities only. Federal regulations may apply to empty container. State and/or local regulations may be different. Dispose of in accordance with all local, state and federal regulations or contract with a licensed chemical disposal agency.

**UNNA number:** UN1477      **Shipping name:** Nitrates, inorganic, n.o.s., (Cupric nitrate)  
**Hazard class:** 5.1      **Packing group:** III      **Reportable Quantity:** 100 lbs (45.4 kg)      **Marine pollutant:** No  
**Exceptions:** Limited quantity equal to or less than 5 Kg      **2012 ERG Guide #** 140

A chemical is considered to be listed if the CAS number for the anhydrous form is on the inventory list.

Component	TSCA	CERCLA (RQ)	RCRA code	DSL	MSL	WHMIS Classification
Cupric nitrate	Listed	100 lbs (45.4 kg)	Not listed	Listed	Not listed	C; D2B

The information contained herein is furnished without warranty of any kind. Employers should use this information only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to ensure proper use of these materials and the safety and health of employees. NTP: National Toxicology Program, IARC: International Agency for Research on Cancer, OSHA: Occupational Safety and Health Administration, STOT: Specific Target Organ Toxicity, SE: Single Exposure, RE: Repeated Exposure, ERG: Emergency Response Guidebook.

Revision Date: August 25, 2014

Supersedes: May 23, 2013

# FLINN SCIENTIFIC, INC.

## Safety Data Sheet (SDS)

SDS #: 266.00

Revision Date: March 21, 2014

### SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

#### Copper(II) Sulfate Stock Solution

Flinn Scientific, Inc. P.O. Box 219, Batavia, IL 60510 (800) 452-1261

CHEMTREC Emergency Phone Number: (800) 424-9300

Signal Word **WARNING**

Pictograms



### SECTION 2 — HAZARDS IDENTIFICATION

Hazard class: Acute toxicity, oral (Category 4). Harmful if swallowed (H302). Do not eat, drink or smoke when using this product (P270).

Hazard class: Acute toxicity, dermal (Category 5). May be harmful in contact with skin (H313).

Hazard class: Skin and serious eye damage, corrosion or irritation (Category 2, 2B). Causes skin and eye irritation (H315+H320).

### SECTION 3 — COMPOSITION, INFORMATION ON INGREDIENTS

Component Name	CAS Number	Formula	Formula Weight	Concentration
Copper(II) sulfate pentahydrate	7758-99-8	CuSO <sub>4</sub> ·5H <sub>2</sub> O	249.69	20%
Water	7732-18-5	H <sub>2</sub> O	18.00	80%

### SECTION 4 — FIRST AID MEASURES

Call a POISON CENTER or physician if you feel unwell (P312).

**If inhaled:** Remove victim to fresh air and keep at rest in a position comfortable for breathing.

**If in eyes:** Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do so. Continue rinsing (P305+P351+P338).

**If on skin:** Wash with plenty of water (P302+P352). **If skin irritation occurs:** Get medical advice or attention (P332+P313).

**If swallowed:** Rinse mouth. Call a POISON CENTER or physician if you feel unwell (P302+P301+P312).

### SECTION 5 — FIRE FIGHTING MEASURES

Nonflammable, noncombustible solution.

**In case of fire:** Use a tri-class dry chemical fire extinguisher.

**NFPA CODE**  
None  
established

### SECTION 6 — ACCIDENTAL RELEASE MEASURES

Ventilate area. Contain the spill with sand or absorbent material and deposit in a sealed bag or container. See Sections 8 and 13 for further information.



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**SECTION 7 — HANDLING AND STORAGE**

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Flinn Suggested Chemical Storage Pattern: Inorganic #2. Store with acetates, halides, sulfates, sulfites, thiosulfates and phosphates.

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**SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION**

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Wear protective gloves, protective clothing, and eye protection (P280). Wash hands thoroughly after handling (P264).

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**SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES**

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Blue liquid. Odorless.

pH: ~4

Specific gravity: 1.10

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**SECTION 10 — STABILITY AND REACTIVITY**

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Shelf life: Good, if stored properly.

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**SECTION 11 — TOXICOLOGICAL INFORMATION**

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Acute effects: Irritant and moderately toxic by ingestion.

ORL-RAT LD<sub>50</sub>: 300 mg/kg as copper (II) sulfate

Chronic effects: N.A.

IHL-RAT LC<sub>50</sub>: N.A.

Target organs: N.A.

SKN-RBT LD<sub>50</sub>: N.A.

N.A. = Not available, not all health aspects of this substance have been fully investigated.

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**SECTION 12 — ECOLOGICAL INFORMATION**

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Data not yet available.

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**SECTION 13 — DISPOSAL CONSIDERATIONS**

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Please review all federal, state and local regulations that may apply before proceeding.

Flinn Suggested Disposal Method #26b is one option.

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**SECTION 14 — TRANSPORT INFORMATION**

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Shipping name: Not regulated. Hazard class: N/A. UN number: N/A.

N/A = Not applicable

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**SECTION 15 — REGULATORY INFORMATION**

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Not listed.

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**SECTION 16 — OTHER INFORMATION**

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This Safety Data Sheet (SDS) is for guidance and is based upon information and tests believed to be reliable. Flinn Scientific, inc. makes no guarantee of the accuracy or completeness of the data and shall not be liable for any damages relating thereto. The data is offered solely for your consideration, investigation, and verification. The data should not be confused with local, state, federal or insurance mandates, regulations, or requirements and CONSTITUTE NO WARRANTY. Any use of this data and information must be determined by the science instructor to be in accordance with applicable local, state or federal laws and regulations. The conditions or methods of handling, storage, use and disposal of the product(s) described are beyond the control of Flinn Scientific, Inc. and may be beyond our knowledge. FOR THIS AND OTHER REASONS, WE DO NOT ASSUME RESPONSIBILITY AND EXPRESSLY DISCLAIM LIABILITY FOR LOSS, DAMAGE OR EXPENSE ARISING OUT OF OR IN ANY WAY CONNECTED WITH THE HANDLING, STORAGE, USE OR DISPOSAL OF THIS PRODUCT(S).

Consult your copy of the *Flinn Science Catalog/Reference Manual* for additional information about laboratory chemicals.

Revision Date: March 21, 2014

# Safety Data Sheet

## Copper (II) Sulfate, Anhydrous

**CAROLINA**<sup>®</sup>  
www.carolina.com

### Section 1 Product Description

**Product Name:** Copper (II) Sulfate, Anhydrous  
**Recommended Use:** Science education applications  
**Synonyms:** Cupric Sulfate (1:1), Copper Monosulfate, Sulfuric Acid Copper (2+) Salt, Cupric Sulfate Anhydrous  
**Distributor:** Carolina Biological Supply Company, 2700 York Road, Burlington, NC 27215-3398  
**Chemical Information:** 800-227-1150 (8am-5pm (ET) M-F)  
**Chemtrec:** 800-424-9300 (Transportation Spill Response 24 hours)

### Section 2 Hazard Identification

Classification of the chemical in accordance with paragraph (d) of §1910.1200;

**WARNING**



Very toxic to aquatic life. Very toxic to aquatic life with long lasting effects.

**GHS Classification:**

Hazardous to the aquatic environment - Acute Category 1, Hazardous to the aquatic environment - Chronic Category 1, Skin Corrosion/Irritation Category 2, Serious Eye Damage/Eye Irritation Category 2A, Acute Toxicity - Oral Category 4

<b>Acute Toxicity Inhalation Gas Contains</b>	100 % of the mixture consists of ingredient(s) of unknown toxicity
<b>Acute Toxicity Inhalation Vapor Contains</b>	100 % of the mixture consists of ingredient(s) of unknown toxicity
<b>Acute Toxicity Inhalation Dust/Mist Contains</b>	100 % of the mixture consists of ingredient(s) of unknown toxicity

### Section 3 Composition / Information on Ingredients

<u>Chemical Name</u>	<u>CAS #</u>	<u>%</u>
Copper (II) Sulfate, Anhydrous	7758-98-7	100

### Section 4 First Aid Measures

**Emergency and First Aid Procedures**

**Inhalation:** In case of accident by inhalation: remove casualty to fresh air and keep at rest.  
**Eyes:** In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
**Ingestion:** If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

### Section 5 Firefighting Procedures

**Extinguishing Media:** Use media suitable to extinguish surrounding fire.  
**Fire Fighting Methods and Protection:** Firefighters should wear full protective equipment and NIOSH approved self-contained breathing apparatus.  
**Fire and/or Explosion Hazards:** Fire or excessive heat may produce hazardous decomposition products.  
**Hazardous Combustion Products:** Copper compounds

### Section 6 Spill or Leak Procedures

# Safety Data Sheet

## Steps to Take in Case Material Is Released or Spilled:

Exposure to the spilled material may be irritating or harmful. Follow personal protective equipment recommendations found in Section 8 of this SDS. Additional precautions may be necessary based on special circumstances created by the spill including; the material spilled, the quantity of the spill, the area in which the spill occurred. Also consider the expertise of employees in the area responding to the spill.

Prevent the spread of any spill to minimize harm to human health and the environment if safe to do so. Wear complete and proper personal protective equipment following the recommendation of Section 8 at a minimum. Dike with suitable absorbent material like granulated clay. Gather and store in a sealed container pending a waste disposal evaluation. Do not allow the spilled product to enter public drainage system or open waterways. Collect spillage.

## Section 7 Handling and Storage

**Handling:** Avoid release to the environment.  
**Storage:** Keep container tightly closed in a cool, well-ventilated place.  
Material is hygroscopic (absorbs moisture).  
**Storage Code:** Green - general chemical storage

## Section 8 Protection Information

Chemical Name	ACGIH		OSHA PEL	
	(TWA)	(STEL)	(TWA)	(STEL)
Copper (II) Sulfate, Anhydrous	1 mg/m <sup>3</sup> TWA (dust and mist, as Cu)	N/A	N/A	N/A

### Control Parameters

**Engineering Measures:** Local exhaust ventilation or other engineering controls are normally required when handling or using this product to avoid overexposure.

**Personal Protective Equipment (PPE):** Lab coat, apron, eye wash, safety shower.

**Respiratory Protection:** No respiratory protection required under normal conditions of use.

**Respirator Type(s):** None required where adequate ventilation is provided. If airborne concentrations are above the applicable exposure limits, use NIOSH/MSHA approved respiratory protection.

**Eye Protection:** Wear chemical splash goggles when handling this product. Have an eye wash station available.

**Skin Protection:** Avoid skin contact by wearing chemically resistant gloves, an apron and other protective equipment depending upon conditions of use. Inspect gloves for chemical break-through and replace at regular intervals. Clean protective equipment regularly. Wash hands and other exposed areas with mild soap and water before eating, drinking, and when leaving work.

**Gloves:** No information available

## Section 9 Physical Data

<b>Formula:</b> CuSO <sub>4</sub>	<b>Vapor Pressure:</b> No data available
<b>Molecular Weight:</b> 159.6	<b>Evaporation Rate (BuAc=1):</b> No data available
<b>Appearance:</b> Pale Green Powder	<b>Vapor Density (Air=1):</b> No data available
<b>Odor:</b> Mild Pleasant, Floral	<b>Specific Gravity:</b> 3.60
<b>Odor Threshold:</b> No data available	<b>Solubility in Water:</b> Soluble
<b>pH:</b> No data available	<b>Log Pow (calculated):</b> No data available
<b>Melting Point:</b> 590 C	<b>Autoignition Temperature:</b> No data available
<b>Boiling Point:</b> 650 C	<b>Decomposition Temperature:</b> No data available
<b>Flash Point:</b> No data available	<b>Viscosity:</b> No data available
<b>Flammable Limits in Air:</b> No data available	<b>Percent Volatile by Volume:</b> No data available

## Section 10 Reactivity Data

**Reactivity:** Mildly reactive - See below

**Chemical Stability:** Stable under normal conditions.

**Conditions to Avoid:** Exposure to moisture

**Incompatible Materials:** Hydroxylamine, Hypobromite, Strong oxidizing agents

**Hazardous Decomposition Products:** Copper compounds

**Hazardous Polymerization:** Will not occur

## Section 11 Toxicity Data

# Safety Data Sheet

**Routes of Entry:** Ingestion.  
**Symptoms (Acute):** Hepatolenticular Degeneration (Wilson's Disease), Impaired Kidney Function, Liver disorders, Vomiting, Diarrhea, Hypotension  
**Delayed Effects:** No data available

## Acute Toxicity:

Chemical Name	CAS Number	Oral LD50	Dermal LD50	Inhalation LC50
Copper (II) Sulfate, Anhydrous	7758-98-7	ORAL LD50 Rat 300 mg/kg	DERMAL LD50 Rabbit 1000 mg/kg	Not applicable

## Carcinogenicity:

Chemical Name	CAS Number	IARC	NTP	OSHA
No data available	7758-98-7	Not listed	Not listed	Not listed

## Chronic Effects:

**Mutagenicity:** No evidence of a mutagenic effect.  
**Teratogenicity:** No evidence of a teratogenic effect (birth defect).  
**Sensitization:** No evidence of a sensitization effect.  
**Reproductive:** No evidence of negative reproductive effects.  
**Target Organ Effects:**  
**Acute:** No information available  
**Chronic:** No information available

## Section 12 Ecological Data

**Overview:** Extreme ecological hazard. This product may be highly toxic to plants and/or wildlife.  
**Mobility:** This material is expected to have moderate mobility in soil. It absorbs to most soil types.  
**Persistence:** Chemically Transformed, Dissolved into water, Adsorbs to soil.  
**Bioaccumulation:** Bioconcentration is expected to occur.  
**Degradability:** Does not biodegrade readily.  
**Other Adverse Effects:** Mobility is dependant on environmental pH.

Chemical Name	CAS Number	Eco Toxicity
Copper (II) Sulfate, Anhydrous	7758-98-7	96 HR LC50 ONCORHYNCHUS MYKISS 0.1 MG/L

## Section 13 Disposal Information

**Disposal Methods:** Dispose in accordance with all applicable Federal, State and Local regulations. Always contact a permitted waste disposer (TSD) to assure compliance.  
**Waste Disposal Code(s):** Not Determined

## Section 14 Transport Information

Ground - DOT Proper Shipping Name:	Air - IATA Proper Shipping Name:
UN 3077 Environmentally Hazardous Substance, Solid, N.O.S (Copper (II) Sulfate, Anhydrous) Class 9 P.G. III	UN 3077 Environmentally Hazardous Substance, Solid, N.O.S (Copper (II) Sulfate, Anhydrous) Class 9 P.G. III

## Section 15 Regulatory Information

**TSCA Status:** All components in this product are on the TSCA Inventory.

Chemical Name	CAS Number	§ 313 Name	§ 304 RQ	CERCLA RQ	§ 302 TPQ	CAA 112(2) TQ
Copper (II) Sulfate, Anhydrous	7758-98-7	No	10 lb RQ	10 lb final RQ; 4.54 kg final RQ	No	No

## Section 16 Additional Information

# Safety Data Sheet

Revised: 03/28/2013

Replaces: None

Printed: 06-21-2013

The information provided in this (Material) Safety Data Sheet represents a compilation of data drawn directly from various sources available to us. Carolina Biological Supply makes no representation or guarantee as to the suitability of this information to a particular application of the substance covered in the (Material) Safety Data Sheet.

## Glossary

ACGIH	American Conference of Governmental Industrial Hygienists	NTP	National Toxicology Program
CAS	Chemical Abstract Service Number	OSHA	Occupational Safety and Health Administration
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act	PEL	Permissible Exposure Limit
DOT	U.S. Department of Transportation	ppm	Parts per million
IARC	International Agency for Research on Cancer	RCRA	Resource Conservation and Recovery Act
N/A	Not Available	SARA	Superfund Amendments and Reauthorization Act
		TLV	Threshold Limit Value
		TSCA	Toxic Substances Control Act
		IDLH	Immediately dangerous to life and health

## Section 1 Chemical Product and Company Identification

Page E1 of E2



5100 West Henrietta Rd  
PO Box 92912  
Rochester, NY 14692-9012  
Tel: (800) 962-2660

Boreal Science  
399 Vansickle Road  
St. Catharines, Ontario  
L2S 3T4 Canada  
Tel: (800) 387-9393

**CHEMTREC 24 Hour Emergency USA**  
**Phone Number (800) 424-9300**  
For laboratory and industrial use only.  
Not for drug, food or household use.

**Product** COPPER(II) SULFATE, ANHYDROUS

**Synonyms** Cupric Sulfate, Anhydrous

## Section 2 Hazards Identification

**Signal word:** WARNING

**Pictograms:** GHS07 / GHS09

**Target organs:** Liver, Kidneys, Lungs, Spleen.

**GHS Classification:**

Acute toxicity-oral (Category 4)

Skin irritation (Category 2)

Eye irritation (Category 2A)

Aquatic acute toxicity (Category 1)

Aquatic chronic toxicity (Category 1)

**GHS Label information: Hazard statement:**

H302: Harmful if swallowed.

H315: Causes skin irritation.

H319: Causes serious eye irritation.

H410: Very toxic to aquatic life with long lasting effects.

**Precautionary statement:**

P264: Wash hands thoroughly after handling.

P270: Do not eat, drink or smoke when using this product.

P273: Avoid release to the environment.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

P301+P330+P312: IF SWALLOWED: Rinse mouth. Call a POISON CENTER or doctor if you feel unwell.

P302+P352: IF ON SKIN: Wash with plenty of water and soap.

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

P332+P313: If skin irritation occurs: Get medical attention.

P337+P313: If eye irritation persists: Get medical attention.

P362+P364: Take off contaminated clothing and wash it before reuse.

P391: Collect spillage.

P501: Dispose of contents/container to a licensed chemical disposal agency in accordance with local/regional/national regulations.

**Hazards not otherwise classified:**

Health hazards not otherwise classified (HHNOC) - Not Known

Physical hazards not otherwise classified (PHNOC) - Not Known

## Section 3 Composition / Information on Ingredients

Chemical Name	CAS #	%	EINECS
Cupric sulfate	7758-98-7	>99%	231-847-6

## Section 4 First Aid Measures

**INGESTION:** HARMFUL IF SWALLOWED. Call physician or Poison Control Center immediately. Induce vomiting only if advised by appropriate medical personnel. Never give anything by mouth to an unconscious person.

**INHALATION:** HARMFUL IF INHALED. CAUSES RESPIRATORY TRACT IRRITATION. Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

**EYE CONTACT:** CAUSES SEVERE EYE IRRITATION. Check for and remove contact lenses. Flush thoroughly with water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get immediate medical attention.

**SKIN ABSORPTION:** CAUSES SKIN IRRITATION. Remove contaminated clothing. Flush thoroughly with mild soap and water. If irritation occurs, get medical attention.

## Section 5 Fire Fighting Measures

**Suitable Extinguishing Media:** Use any media suitable for extinguishing supporting fire

**Protective Actions for Fire-fighters:** In fire conditions, wear a NIOSH/MSHA-approved self-contained breathing apparatus and full protective gear. Use water spray to keep fire-exposed containers cool.

**Specific Hazards:** During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

## Section 6 Accidental Release Measures

**Personal Precautions:** Evacuate personnel to safe area. Use proper personal protective equipment as indicated in Section 8. Provide adequate ventilation.

**Environmental Precautions:** Avoid runoff into storm sewers and ditches which lead to waterways.

**Containment and Cleanup:** Sweep or vacuum up and place in a suitable container for proper disposal. Wash spill area with soap and water.

**Precautions for Safe Handling:** Read label on container before using. Do not wear contact lenses when working with chemicals. Keep out of reach of children. Avoid contact with eyes, skin and clothing. Do not inhale dusts. Use with adequate ventilation. Avoid ingestion. Wash thoroughly after handling. Remove and wash clothing before reuse.

**Conditions for Safe Storage:** Store in a cool, dry, well-ventilated area away from incompatible substances.

## Section 8 Exposure Controls / Personal Protection

Exposure Limits:	Chemical Name	ACGIH (TLV)	OSHA (PEL)	NIOSH (REL)
	Copper, dusts and mists, as Cu	TWA: 1 mg/m <sup>3</sup>	TWA: 1 mg/m <sup>3</sup>	TWA: 1 mg/m <sup>3</sup>

**Engineering controls:** Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower and fire extinguishing material. Personnel should wear safety glasses, goggles, or faceshield, lab coat or apron, appropriate protective gloves. Use adequate ventilation to keep airborne concentrations low.

**Respiratory protection:** None should be needed in normal laboratory handling at room temperatures. If dusty conditions prevail, work in fume hood or wear a NIOSH/MSHA-approved respirator.

## Section 9 Physical &amp; Chemical Properties

<b>Appearance:</b> Solid, off-white powder	<b>Evaporation rate ( = 1):</b> Not applicable	<b>Partition coefficient:</b> Data not available
<b>Odor:</b> Odorless	<b>Flammability (solid/gas):</b> Not applicable	<b>Auto-ignition temperature:</b> Data not available
<b>Odor threshold:</b> Data not available	<b>Explosion limits: Lower / Upper:</b> Not applicable	<b>Decomposition temperature:</b> Data not available
<b>pH:</b> Data not available	<b>Vapor pressure (mm Hg):</b> Data not available	<b>Viscosity:</b> Data not available.
<b>Melting / Freezing point:</b> 340°C (644°F)	<b>Vapor density (Air = 1):</b> Data not available	<b>Molecular formula:</b> CuSO <sub>4</sub>
<b>Boiling point:</b> Decomposes	<b>Relative density (Specific gravity):</b> 2.28 @ 15.6°C	<b>Molecular weight:</b> 159.60
<b>Flash point:</b> Non-flammable	<b>Solubility(ies):</b> Appreciable in water	

## Section 10 Stability &amp; Reactivity

**Chemical stability:** Stable **Hazardous polymerization:** Will not occur.

**Conditions to avoid:** Hygroscopic material. Stable when kept dry, under normal temperature and pressure. Avoid high temperatures, exposure to air and incompatible materials.

**Incompatible materials:** Reducing agents, acetylene or nitromethane, magnesium, strong bases, alkalines, phosphates, hydrazine, zirconium. Can corrode aluminum, steel and iron.

**Hazardous decomposition products:** Oxides of sulfur and copper fumes.

## Section 11 Toxicological Information

**Acute toxicity:** Oral-rat LD50: 300 mg/kg

**Skin corrosion/irritation:** Data not available

**Serious eye damage/irritation:** Data not available

**Respiratory or skin sensitization:** Data not available

**Germ cell mutagenicity:** Data not available

**Carcinogenicity:** Data not available

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**Reproductive toxicity:** Data not available

**STOT-single exposure:** Data not available

**STOT-repeated exposure:** Data not available

**Aspiration hazard:** Data not available

**Potential health effects:**

Inhalation: May cause irritation to the mucous membranes and upper respiratory tract.

Ingestion: Ingestion can cause irritation to the digestive tract and abdominal pain.

Skin: Contact with skin causes slight irritation. Excessive exposure may cause allergic dermatitis. May cause irritation or burns on wet skin.

Eyes: Can cause severe irritation and may result in irreversible eye damage.

**Signs and symptoms of exposure:** *Note to physician:* Probable mucosal damage may contradict the use of gastric lavage. Measures against circulatory shock, respiratory depression and convulsions may be needed. Wilson's disease can be aggravated by excessive exposure. Symptoms include nausea, vomiting, gastrointestinal pain, diarrhea, dizziness, jaundice, and general debility.

**Additional information:** RTECS #: GL8800000

## Section 12 Ecological Information

**Toxicity to fish:** Salmo gairdneri (fish, estuary, fresh water), LC50 = < 0.75-0.84 mg/L

**Toxicity to daphnia and other aquatic invertebrates:** No data available

**Toxicity to algae:** No data available

**Persistence and degradability:** No data available **Bioaccumulative potential:** No data available

**Mobility in soil:** No data available **PBT and vPvB assessment:** No data available

**Other adverse effects:** An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

## Section 13 Disposal Considerations

These disposal guidelines are intended for the disposal of catalog-size quantities only. Federal regulations may apply to empty container. State and/or local regulations may be different. Dispose of in accordance with all local, state and federal regulations or contract with a licensed chemical disposal agency.

## Section 14 Transport Information (US DOT / CANADA TDG)

**UN/NA number:** UN3077 **Shipping name:** Environmentally hazardous substances, solid, n.o.s., (Cupric sulfate)

**Hazard class:** 9 **Packing group:** III **Reportable Quantity:** 10 lbs (4.54 kg) **Marine pollutant:** Yes

**Exceptions:** Non regulated equal to or less than 4.539 Kg ; Reportable quantity equal to or more than 4.54 Kg **2016 ERG Guide #** 171

## Section 15 Regulatory Information

A chemical is considered to be listed if the CAS number for the anhydrous form is on the Inventory list.

Component	TSCA	CERLCA (RQ)	RCRA code	DSL	NDSL	CA Prop 65
Cupric sulfate	Listed	10 lbs (4.54 kg)	Not listed	Not listed	Not listed	This product does not contain any chemicals known to the State of California to cause cancer or reproductive toxicity.

## Section 16 Other Information

The information contained herein is furnished without warranty of any kind. Employers should use this information only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees. NTP: National Toxicology Program, IARC: International Agency for Research on Cancer, OSHA: Occupational Safety and Health Administration, STOT: Specific Target Organ Toxicity, SE: Single Exposure, RE: Repeated Exposure, ERG: Emergency Response Guidebook.

## Section 1 L'identification de produit chimique et de compagnie

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PO Box 92912  
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L2S 3T4 Canada  
Tel: (800) 387-9393

**CHEMTREC 24 Numéros De Téléphone De  
Secours D'Heure (800) 424-9300**  
Pour l'usage industriel et de laboratoire seulement.  
Pas pour l'usage de drogue, de nourriture ou de ménage.

<b>Produit</b>	<b>SULFATE DE CUIVRE(II), ANHYDRE</b>
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<b>Synonymes</b>	Sulfate cuivrique, anhydre
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## Section 2 Identification De Risques

Mention d'avertissement: AVERTISSEMENT

Pictogrammes: GHS07 / GHS09

Les organes cibles: Le foie, les reins, les poumons et le rate.



## Classification par le GHS:

Acute toxicity-oral (Catégorie 4)

Skin irritation (Category 2)

Eye irritation (Catégorie 2A)

Aquatic acute toxicity (Category 1)

Aquatic chronic toxicity (Category 1)

## Renseignements sur l'étiquette GHS: Mention de danger:

H302: Nocif en cas d'ingestion.

H315: Provoque une irritation cutanée.

H319: Provoque une sévère irritation des yeux.

H410: Très toxique pour les organismes aquatiques, entraîne des effets néfastes à long terme.

## Déclarations de précaution(s):

P264: Se laver les mains soigneusement après manipulation.

P270: Ne pas manger, boire ou fumer en manipulant ce produit.

P273: Éviter le rejet dans l'environnement.

P280: Porter des gants de protection / des vêtements de protection / un équipement de protection des yeux / du visage.

P301+P330+P312: EN CAS D'INGESTION: Rincer la bouche. Appeler un CENTRE ANTIPOISON ou un médecin en cas de malaise.

P302+P352: EN CAS DE CONTACT AVEC LA PEAU: Laver abondamment à l'eau et du savon.

P305+P351+P338: EN CAS DE CONTACT AVEC LES YEUX: Rincer avec précaution à l'eau pendant plusieurs minutes. Enlever les lentilles de contact si la victime en porte et si elles peuvent être facilement enlevées. Continuer à rincer.

P332+P313: En cas d'irritation cutanée: Obtenir des soins médicaux.

P337+P313: Si l'irritation oculaire persiste: Obtenir des soins médicaux.

P362+P364: Enlever les vêtements contaminés et les laver avant réutilisation.

P391: Recueillir le produit répandu.

P501: Éliminer le contenu / récipient dans une agence agréée d'élimination chimique conformément à la réglementation locale / régionale / nationale.

## Dangers non classés autrement:

Dangers pour la santé non classés ailleurs (HHNOC) - pas connu

Dangers physiques non classés autrement (PHNOC) - pas connu

## Section 3 Composition / Information Sur Des Ingrédients

Nommé Chimique	# CAS	%	EINECS
Sulfate cuivrique	7758-98-7	>99%	231-847-6

## Section 4 Mesures De Premiers Soins

**INGESTION:** NOCIF EN CAS D'INGESTION. Appeler immédiatement un médecin ou un centre antipoison. Provoquer le vomissement seulement si conseillé par le personnel médical approprié. Ne portez rien à la bouche d'une personne inconsciente.

**INHALATION:** NOCIF SI INHALÉ. PROVOQUE UNE IRRITATION DES VOIES RESPIRATOIRES. Retirer à l'air frais. Si elle ne respire pas, pratiquer la respiration artificielle. Si la respiration est difficile, donnez de l'oxygène. Voir un docteur.

**CONTACT AVEC LES YEUX:** PROVOQUE UNE IRRITATION GRAVE DES YEUX. Vérifiez et retirez les lentilles de contact. Rincez abondamment avec de l'eau pendant au moins 15 minutes, en soulevant les paupières supérieures et inférieures de temps en temps. Obtenez des soins médicaux immédiats.

**ABSORPTION PAR LA PEAU:** PROVOQUE UNE IRRITATION DE LA PEAU. Enlever les vêtements contaminés. Rincer abondamment avec un savon doux et de l'eau. En cas d'irritation, consulter un médecin.

## Section 5 Mesures De Lutte Contre l'Incendie

**Moyens d'extinction:** Utilisez des supports adaptés pour éteindre le feu à l'appui.

**Actions de protection pour les sapeurs-pompiers:** En cas d'incendie, porter un appareil respiratoire NIOSH / MSHA approuvé autonome et un équipement complet de protection. Utiliser un jet d'eau pour maintenir incendie refroidir les conteneurs exposés.

**Dangers spécifiques:** En cas d'incendie, des gaz irritants et très toxiques peuvent être générés par la décomposition thermique ou la combustion.

## Section 6 Mesures De Déchargement Accidentel

**Précautions personnelles:** Évacuer le personnel vers la zone sûre. Utiliser un équipement de protection personnelle comme indiqué dans la Section 8. Assurer une ventilation adéquate.

**Précautions environnementales:** Éviter tout ruissellement vers les égouts pluviaux et les fossés qui aboutissent aux voies navigables.

**Confinement et de nettoyage:** Balayez ou nettoyez à l'aspirateur vers le haut et placez dans un récipient approprié pour la disposition appropriée. Laver la zone de déversement avec du savon et de l'eau.



**Précautions pour la manutention en toute sécurité:** Lire l'étiquette sur le contenant avant d'utiliser. Ne pas porter de lentilles cornéennes lorsque vous travaillez avec des produits chimiques. Tenir hors de portée des enfants. Éviter tout contact avec les yeux, la peau et les vêtements. Ne pas inhaler les poussières. Utiliser avec une ventilation adéquate. Éviter l'ingestion. Bien se laver après la manipulation. Retirer et laver les vêtements avant de les réutiliser.

**Conditions de stockage:** Stocker dans un endroit frais, sec et bien aéré, loin des substances incompatibles. Substance loin des sources d'allumage.

## Section 8 Commandes D'Exposition / Protection Personnelle

Limites d'exposition:	Nommé Chimique	ACGIH (TLV)	OSHA (PEL)	NIOSH (REL)
	Cuivre, poussières et brouillards, que Cu	TWA: 1 mg/m <sup>3</sup>	TWA: 1 mg/m <sup>3</sup>	TWA: 1 mg/m <sup>3</sup>

**Contrôles d'ingénierie:** Les installations d'entreposage ou d'utilisation de ce matériel doit être équipé d'une douche oculaire et une douche de sécurité et le matériel d'extinction d'incendie. Le personnel doit porter des lunettes de sécurité, des lunettes, ou un écran facial, une blouse de laboratoire ou tablier, des gants protecteurs appropriés. Utiliser une ventilation adéquate pour maintenir les concentrations atmosphériques faible.

**Protection respiratoire:** Aucun ne devrait être nécessaire dans le laboratoire normal manipulant aux températures ambiantes. Si les conditions poussiéreuses prévaloir, travailler dans la hotte ou de porter un masque respiratoire approuvé NIOSH / MSHA.

## Section 9 Propriétés Physiques Et Chimiques

<b>Apparence:</b> Solide, poudre blanc cassé	<b>Taux d'évaporation ( = 1):</b> Non applicable	<b>Coefficient de partage:</b> Données non disponibles
<b>Odeur:</b> Odorless	<b>Inflammabilité (solide / gaz):</b> Non applicable	<b>Auto-inflammation:</b> Données non disponibles
<b>Seuil de l'odeur:</b> Données non disponibles.	<b>Limites d'explosivité: Bas / Max:</b> Non applicable	<b>Température de décomposition:</b> Données non disponibles
<b>pH:</b> Données non disponibles	<b>Pression de vapeur (mm Hg):</b> Données non disponibles	<b>Viscosité:</b> Données non disponibles
<b>Point de fusion / congélation:</b> 340°C (644°F)	<b>Densité de vapeur (Air = 1):</b> Données non disponibles	<b>Formule moléculaire:</b> CuSO <sub>4</sub>
<b>Point d'ébullition:</b> Decomposes	<b>Densité relative (gravité spécifique):</b> 2.28 @ 15.6°C	<b>Poids moléculaire:</b> 159.60
<b>Point d'éclair:</b> Ininflammable	<b>Solubilité (s):</b> Appréciable dans l'eau	

## Section 10 Stabilité Et Réactivité

**Stabilité chimique:** Stable

**Polymérisation dangereuse:** N'aura pas lieu.

**Conditions à éviter:** Matériel hygroscopique. Écurie une fois gardé au sec, sous la température et la pression normales. Évitez les températures élevées, l'exposition à l'air et les matériaux incompatibles.

**Matières incompatibles:** Agents réducteurs, acétylène ou nitrométhane, magnésium, bases fortes, alcalines, phosphates, hydrazine, zirconium. Peut corroder l'aluminium, l'acier et le fer.

**Produits dangereux de décomposition:** Oxydes de soufre et le vapeurs de cuivre.

## Section 11 L'Information Toxicologique

**Toxicité aiguë:** Oral-rat LD50: 300 mg/kg

**La corrosion de la peau et l'irritation:** Données non disponibles

**Des lésions oculaires graves / irritation:** Données non disponibles

**Respiratoire ou sensibilisation de la peau:** Données non disponibles

**Mutagénicité des cellules germinales:** Données non disponibles

**Cancérogène:** Données non disponibles

NTP: Aucun composant de ce produit présent à des niveaux supérieurs ou égaux à 0,1% n'a été identifié comme cancérogène reconnu ou présumé par NTP.

IARC: Aucun composant de ce produit présent à des niveaux supérieurs ou égaux à 0,1% n'a été identifié comme cancérogène probable, possible ou confirmé par IARC.

OSHA: Aucun composant de ce produit présent à des niveaux supérieurs ou égaux à 0,1% n'a été identifié comme cancérogène ni comme cancérogène possible par OSHA.

**Reproductive toxicity:** Données non disponibles

**STOT-exposition unique:** Données non disponibles

**STOT-une exposition répétée:** Données non disponibles

**Risque d'aspiration:** Données non disponibles

**Effets d'une surexposition:**

Inhalation: Peut provoquer une irritation des muqueuses et des voies respiratoires supérieures.

Ingestion: L'ingestion peut provoquer une irritation du tube digestif et des douleurs abdominales.

Peau: Contact avec la peau provoque une légère irritation. L'exposition excessive peut causer une dermatite allergique. Peut causer des irritations ou des brûlures sur la peau mouillée.

Yeux: Peut causer une grave irritation et peut causer des dommages irréversibles aux yeux.

**Les signes et les symptômes de l'exposition:** *Note au médecin:* Des dommages probables aux muqueuses peuvent contredire l'usage d'un lavage gastrique. Mesures contre le choc circulatoire, la dépression respiratoire et les convulsions peuvent être nécessaires. La maladie de Wilson peut être aggravé par une exposition excessive. Les symptômes incluent la nausée, des vomissements, des douleurs gastro-intestinales, la diarrhée, les étourdissements, la jaunisse et une faiblesse générale.

**Informations complémentaires:** RTECS #: GL8800000

## Section 12 L'Information Écologique

**Toxicité pour les poissons:** Salmo gairdneri (fish, estuary, fresh water), LC50 = < 0.75-0.84 mg/L

**Toxicité pour les daphnies et autres invertébrés aquatiques:** Pas de données disponible

**Toxicité pour les algues:** Pas de données disponible

**Persistance et dégradabilité:** Pas de données disponible

**Potentiel de bioaccumulation:** Pas de données disponible

**Mobilité dans le sol:** Pas de données disponibles

**Évaluation PBT et vPvB:** Pas de données disponibles

**Autres effets indésirables:** Un danger pour l'environnement ne peut pas être exclu dans l'éventualité d'une manipulation ou d'élimination.

## Section 13 Considérations De Disposition

Ces lignes directrices sont destinées à l'élimination de la disposition d'un catalogue de taille seules les quantités. Les règlements fédéraux peuvent s'appliquer aux contenants vides. Des réglementations nationales et / ou local peut être différent. Éliminer conformément à toutes les réglementations locales, provinciales et fédérales ou d'un contrat avec une agence élimination des produits chimiques sous licence.

## Section 14 L'Information De Transport (US DOT / CANADA TMD)

**Numéro UN / NA:** UN3077

**Nom d'expédition:** Substances nocives pour l'environnement, solide, n.o.s., (Sulfate cuprique)

**Classe de danger:** 9

**Groupe d'emballage:** III

**Quantité à déclarer:** 10 lbs (4.54 kg)

**Polluant marin:** No

**Exceptions:** Non réglé égale à ou moins de 4.539 Kg; Quantité à déclaration obligatoire égale ou supérieure à 4.54 Kg **2016 ERG Guide #:** 171

## Section 15 L'Information De Normalisation

Un produit chimique est considéré comme inscrit si le numéro CAS pour la forme anhydre est sur la liste d'inventaire.

Composant	TSCA	CERLCA (RQ)	RCRA code	DSL	NDSL
Sulfate de cuivre	Listed	10 lbs (4.54 kg)	Not listed	Not listed	Not listed

## Section 16 L'autre Information

Les informations contenues dans ce document sont fournis sans garantie d'aucune sorte. Les employeurs devraient considérer cette information seulement comme complément à d'autres informations recueillies par eux et doivent prendre des décisions indépendantes de la pertinence et l'exhaustivité de l'information de toutes les sources afin d'assurer une utilisation correcte de ces matériaux et de la sécurité et la santé des employés. NTP: National Toxicology Program, IARC: International Agency for Research on Cancer, OSHA: Occupational Safety and Health Administration, STOT: Specific Target Organ Toxicity, SE: Single Exposure, RE: Repeated Exposure, ERG: Emergency Response Guidebook.

# FLINN SCIENTIFIC, INC.

## Safety Data Sheet (SDS)

SDS #: 285.10

Revision Date: March 21, 2014

### SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

#### Copper(II) Sulfate, Anhydrous

Flinn Scientific, Inc. P.O. Box 219, Batavia, IL 60510 (800) 452-1261

CHEMTREC Emergency Phone Number: (800) 424-9300

Signal Word **DANGER**

Pictograms



### SECTION 2 — HAZARDS IDENTIFICATION

Hazard class: Acute toxicity, oral (Category 3). Toxic if swallowed (H301). Do not eat, drink or smoke when using this product (P270).

Hazard class: Skin and serious eye damage, corrosion or irritation (Category 2, 2A). Causes skin and serious eye irritation (H315+H319).

### SECTION 3 — COMPOSITION, INFORMATION ON INGREDIENTS

Component Name	CAS Number	Formula	Formula Weight	Concentration
Copper(II) sulfate, anhydrous	7758-98-7	CuSO <sub>4</sub>	159.61	
Synonym: Cupric sulfate, anhydrous				

### SECTION 4 — FIRST AID MEASURES

Immediately call a POISON CENTER or physician (P310).

**If inhaled:** Remove victim to fresh air and keep at rest in a position comfortable for breathing.

**If in eyes:** Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do so. Continue rinsing (P305+P351+P338). **If eye irritation persists:** Get medical advice or attention (P337+P313).

**If on skin:** Rinse cautiously with water for several minutes (P351).

**If swallowed:** Rinse mouth. Immediately call a POISON CENTER or physician (P301+P330+P310).

### SECTION 5 — FIRE FIGHTING MEASURES

Nonflammable, noncombustible solid.

When heated to decomposition, may emit toxic fumes.

**In case of fire:** Use a tri-class dry chemical fire extinguisher.

**NFPA CODE**  
None  
established

### SECTION 6 — ACCIDENTAL RELEASE MEASURES

Sweep up the spill, place in a sealed bag or container, and dispose. Ventilate area and wash spill site after material pickup is complete. See Sections 8 and 13 for further information.

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**SECTION 7 — HANDLING AND STORAGE**

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Flinn Suggested Chemical Storage Pattern: Inorganic #2. Store with acetates, halides, sulfates, sulfites, thiosulfates and phosphates. Deliquescent. Store in a cool, dry place within a Flinn Chem-Saf™ bag.

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**SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION**

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Wear protective gloves, protective clothing, and eye protection (P280). Wash hands thoroughly after handling (P264).

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**SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES**

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Off-white powder. Odorless.

Specific gravity: 3.6

Soluble: Water. Practically insoluble in alcohol.

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**SECTION 10 — STABILITY AND REACTIVITY**

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Avoid contact with moisture and finely powdered metals. Will corrode steel.

Shelf life: Poor, deliquescent. See Section 7 for further information.

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**SECTION 11 — TOXICOLOGICAL INFORMATION**

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Acute effects: Toxic, severe eye irritant, and gastrointestinal disturbances.

ORL-RAT LD<sub>50</sub>: 300 mg/kg

IHL-RAT LC<sub>50</sub>: N.A.

Chronic effects: Possible mutagen.

SKN-RBT LD<sub>50</sub>: N.A.

Target organs: Liver, kidneys, and blood.

N.A. = Not available, not all health aspects of this substance have been fully investigated.

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**SECTION 12 — ECOLOGICAL INFORMATION**

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Data not yet available.

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**SECTION 13 — DISPOSAL CONSIDERATIONS**

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Please review all federal, state and local regulations that may apply before proceeding.

Flinn Suggested Disposal Method #26a is one option.

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**SECTION 14 — TRANSPORT INFORMATION**

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Shipping name: Not regulated. Hazard class: N/A. UN number: N/A.

N/A = Not applicable

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**SECTION 15 — REGULATORY INFORMATION**

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TSCA-listed, EINECS-listed (231-847-6).

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**SECTION 16 — OTHER INFORMATION**

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This Safety Data Sheet (SDS) is for guidance and is based upon information and tests believed to be reliable. Flinn Scientific, Inc. makes no guarantee of the accuracy or completeness of the data and shall not be liable for any damages relating thereto. The data is offered solely for your consideration, investigation, and verification. The data should not be confused with local, state, federal or insurance mandates, regulations, or requirements and CONSTITUTE NO WARRANTY. Any use of this data and information must be determined by the science instructor to be in accordance with applicable local, state or federal laws and regulations. The conditions or methods of handling, storage, use and disposal of the product(s) described are beyond the control of Flinn Scientific, Inc. and may be beyond our knowledge. FOR THIS AND OTHER REASONS, WE DO NOT ASSUME RESPONSIBILITY AND EXPRESSLY DISCLAIM LIABILITY FOR LOSS, DAMAGE OR EXPENSE ARISING OUT OF OR IN ANY WAY CONNECTED WITH THE HANDLING, STORAGE, USE OR DISPOSAL OF THIS PRODUCT(S).

Consult your copy of the *Flinn Science Catalog/Reference Manual* for additional information about laboratory chemicals.

Revision Date: March 21, 2014

**Section 1 Chemical Product and Company Information**

5100 West Henrietta Rd  
PO Box 92912  
Rochester, NY 14692-9012  
Tel: (800) 962-2660

**CHEMTREC 24 Hour Emergency**  
**Phone Number (800) 424-9300**  
For laboratory use only.  
Not for drug, food or household use.

**Product** COPPER(II) SULFATE, PENTAHYDRATE

**Synonyms** Cupric Sulfate, 5-Hydrate

**Section 2 Hazards Identification**

**Signal word:** WARNING

**Pictograms:** GHS07 / GHS09

**Target organs:** Liver, Kidneys, Lungs, Spleen.

**GHS Classification:**

Acute toxicity-oral (Category 4)

Skin irritation (Category 2)

Eye irritation (Category 2A)

Aquatic acute toxicity (Category 1)

Aquatic chronic toxicity (Category 1)

**GHS Label information: Hazard statement:**

H302: Harmful if swallowed.

H315: Causes skin irritation.

H319: Causes serious eye irritation.

H410: Very toxic to aquatic life with long lasting effects.

**Precautionary statement:**

P264: Wash hands thoroughly after handling.

P270: Do not eat, drink or smoke when using this product.

P273: Avoid release to the environment.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

P301+P330+P312: IF SWALLOWED: Rinse mouth. Call a POISON CENTER or doctor if you feel unwell.

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

P332+P313: If skin irritation occurs: Get medical attention.

P337+P313: If eye irritation persists: Get medical attention.

P362+P364: Take off contaminated clothing and wash it before reuse.

P391: Collect spillage.

P501: Dispose of contents/container to a licensed chemical disposal agency in accordance with local/regional/national regulations.

Ca Prop 65 - This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm.

**Section 3 Composition / Information on Ingredients**

Chemical Name	CAS #	%	EINECS
Cupric sulfate	7758-99-8	>99%	231-847-6 (anhydrous)

**Section 4 First Aid Measures**

**INGESTION:** MAY BE HARMFUL IF SWALLOWED. Call physician or Poison Control Center immediately. Induce vomiting only if advised by appropriate medical personnel. Never give anything by mouth to an unconscious person.

**INHALATION:** MAY BE HARMFUL IF INHALED. CAUSES RESPIRATORY TRACT IRRITATION. Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

**EYE CONTACT:** CAUSES SEVERE EYE IRRITATION. Check for and remove contact lenses. Flush thoroughly with water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get immediate medical attention.

**SKIN ABSORPTION:** MAY CAUSE SKIN IRRITATION. Remove contaminated clothing. Flush thoroughly with mild soap and water. If irritation occurs, get medical attention.

**Section 5 Fire Fighting Measures**

**Suitable Extinguishing Media:** Use any media suitable for extinguishing supporting fire

**Protective Actions for Fire-fighters:** In fire conditions, wear a NIOSH/MSHA-approved self-contained breathing apparatus and full protective gear. Use water spray to keep fire-exposed containers cool.

**Specific Hazards:** During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

**Section 6 Accidental Release Measures**

**Personal Precautions:** Evacuate personnel to safe area. Use proper personal protective equipment as indicated in Section 8. Provide adequate ventilation.

**Environmental Precautions:** Avoid runoff into storm sewers and ditches which lead to waterways.

**Containment and Cleanup:** Sweep or vacuum up and place in a suitable container for proper disposal. Wash spill area with soap and water.

**Section 7 Handling & Storage**

**Precautions for Safe Handling:** Read label on container before using. Do not wear contact lenses when working with chemicals. Keep out of reach of children. Avoid contact with eyes, skin and clothing. Do not inhale dusts. Use with adequate ventilation. Avoid ingestion. Wash thoroughly after handling. Remove and wash clothing before reuse.

**Conditions for Safe Storage:** Store in a cool, dry, well-ventilated area away from incompatible substances.

**Section 8 Exposure Controls / Personal Protection**

Exposure Limits:	Chemical Name	ACGIH (TLV)	OSHA (PEL)	NIOSH (REL)
	Copper, dusts and mists, as Cu	TWA: 1 mg/m <sup>3</sup>	TWA: 1 mg/m <sup>3</sup>	TWA: 1 mg/m <sup>3</sup>

**Engineering controls:** Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower and fire extinguishing material. Personnel should wear safety glasses, goggles, or faceshield, lab coat or apron, appropriate protective gloves. Use adequate ventilation to keep airborne concentrations low.

**Respiratory protection:** None should be needed in normal laboratory handling at room temperatures. If dusty conditions prevail, work in fume hood or wear a NIOSH/MSHA-approved respirator.

**Section 9 Physical & Chemical Properties**

<b>Appearance:</b> Blue, crystalline solid	<b>Evaporation rate ( = 1):</b> Not applicable	<b>Partition coefficient:</b> Data not available
<b>Odor:</b> Odorless	<b>Flammability (solid/gas):</b> Not applicable	<b>Auto-ignition temperature:</b> Data not available
<b>Odor threshold:</b> Data not available	<b>Explosion limits: Lower / Upper:</b> Not applicable	<b>Decomposition temperature:</b> 560°C (1040°F)
<b>pH:</b> 3.7-4.2 (10% solution)	<b>Vapor pressure (mm Hg):</b> 20 torr @ 22.5°C	<b>Viscosity:</b> Data not available.
<b>Melting / Freezing point:</b> 150°C (302°F)	<b>Vapor density (Air = 1):</b> Data not available	<b>Molecular formula:</b> CuSO <sub>4</sub> ·5H <sub>2</sub> O
<b>Boiling point:</b> Decomposes	<b>Relative density (Specific gravity):</b> 2.284	<b>Molecular weight:</b> 249.68
<b>Flash point:</b> Non-flammable	<b>Solubility(ies):</b> 31.6 g/100 ml water @ 0°C	

**Section 10 Stability & Reactivity**

**Chemical stability:** Stable      **Hazardous polymerization:** Will not occur.  
**Conditions to avoid:** Hygroscopic material. Stable when kept dry, under normal temperature and pressure. Avoid high temperatures, exposure to air and incompatible materials.

**Incompatible materials:** Reducing agents, acetylene or nitromethane, magnesium, strong bases, alkalines, phosphates, hydrazine, zirconium. Can corrode aluminum, steel and iron.

**Hazardous decomposition products:** Oxides of sulfur and copper fumes.

**Section 11 Toxicological Information**

**Acute toxicity:** Oral-rat LD50: 300 mg/kg [Copper sulfate anhydrous]

**Skin corrosion/irritation:** Data not available

**Serious eye damage/irritation:** Data not available

**Respiratory or skin sensitization:** Data not available

**Germ cell mutagenicity:** Data not available

**Carcinogenicity:** Data not available

**NTP:** No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

**IARC:** No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

**OSHA:** No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**Reproductive toxicity:** Data not available

**STOT-single exposure:** Data not available

**STOT-repeated exposure:** Data not available

**Aspiration hazard:** Data not available

**Potential health effects:**

**Inhalation:** May cause irritation to the mucous membranes and upper respiratory tract.

**Ingestion:** Ingestion can cause irritation to the digestive tract and abdominal pain.

**Skin:** Contact with skin causes slight irritation. Excessive exposure may cause allergic dermatitis. May cause irritation or burns on wet skin.

**Eyes:** Can cause severe irritation and may result in irreversible eye damage.

**Signs and symptoms of exposure:** *Note to physician:* Probable mucosal damage may contradict the use of gastric lavage. Measures against circulatory shock, respiratory depression and convulsions may be needed. Wilson's disease can be aggravated by excessive exposure. Symptoms include nausea, vomiting, gastrointestinal pain, diarrhea, dizziness, jaundice, and general debility.

**Additional information:** RTECS #: GL8900000

**Section 12 Ecological Information**

**Toxicity to fish:** *Salmo gairdneri* (fish, estuary, fresh water), LC50 = < 0.75-0.84 mg/L [Copper sulfate anhydrous]

**Toxicity to daphnia and other aquatic invertebrates:** No data available

**Toxicity to algae:** No data available

**Persistence and degradability:** No data available

**Bioaccumulative potential:** No data available

**Mobility in soil:** No data available

**PBT and vPvB assessment:** No data available

**Other adverse effects:** An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

**Section 13 Disposal Considerations**

These disposal guidelines are intended for the disposal of catalog-size quantities only. Federal regulations may apply to empty container. State and/or local regulations may be different. Dispose of in accordance with all local, state and federal regulations or contract with a licensed chemical disposal agency.

**Section 14 Transport Information**

**UN/NA number:** UN3077

**Shipping name:** Environmentally hazardous substances, solid, n.o.s., (Cupric sulfate)

**Hazard class:** 9

**Packing group:** III

**Reportable Quantity:** 10 lbs (4.54 kg)

**Marine pollutant:** Yes

**Exceptions:** Non regulated equal to or less than 4.539 Kg ; Reportable quantity equal to or more than 4.54 Kg

**2012 ERG Guide #** 171

**Section 15 Regulatory Information**

A chemical is considered to be listed if the CAS number for the anhydrous form is on the Inventory list.

Component	TSCA	CERLCA (RQ)	RCRA code	DSL	NDSL	WHMIS Classification
Cupric sulfate	Listed	10 lbs (4.54 kg)	Not listed	Not listed	Not listed	D2B

**Section 16 Additional Information**

The information contained herein is furnished without warranty of any kind. Employers should use this information only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees. NTP: National Toxicology Program, IARC: International Agency for Research on Cancer, OSHA: Occupational Safety and Health Administration, STOT: Specific Target Organ Toxicity, SE: Single Exposure, RE: Repeated Exposure, ERG: Emergency Response Guidebook.

**Section 1 Chemical Product and Company Information** Page 1 of 2



5100 West Henrietta Rd  
 PC Box 92912  
 Rochester, NY 14692-9012  
 Tel: (800) 962-2660

**CHEMTREC 24 Hour Emergency**  
**Phone Number (800) 424-9300**  
 For laboratory use only.  
 Not for drug, food or household use.

<b>Product</b>	COPPER METAL
<b>Synonyms</b>	Copper Metal Powder / Copper Powder

**Section 2 Hazards Identification**

This substance or mixture has not been classified as hazardous according to the Globally Harmonized System (GHS) of Classification and Labeling of Chemicals.

**Signal word:** Not classified  
**Pictograms:** Not classified  
**Target organs:** Liver, Kidneys

**GHS Classification:** Not classified  
**GHS Label information: Hazard statement(s):** Not classified  
**Precautionary statement(s):** Not classified

**Supplemental information:**

Do not breathe dust or fume. Do not get in eyes, on skin, or on clothing. Wear protective gloves/protective clothing/eye protection/face protection. Wash hands thoroughly after handling. Get medical attention if you feel unwell.

**Ca Prop 65** - This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm.

**Section 3 Composition / Information on Ingredients**

Nommé Chimique	# CAS	%	EINECS
Copper metal	7440-50-8	100%	231-159-6

**Section 4 First Aid Measures**

**INGESTION:** MAY BE HARMFUL IF SWALLOWED. Call physician or Poison Control Center immediately. Induce vomiting only if advised by appropriate medical personnel. Never give anything by mouth to an unconscious person.

**INHALATION:** HARMFUL IF INHALED AS FUME. Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

**EYE CONTACT:** MAY CAUSE IRRITATION. Check for and remove contact lenses. Flush thoroughly with water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get immediate medical attention.

**SKIN ABSORPTION:** MAY CAUSE IRRITATION. Remove contaminated clothing. Flush thoroughly with mild soap and water. If irritation occurs, get medical attention.

**Section 5 Fire Fighting Measures**

**Suitable Extinguishing Media:** Use triclass, dry chemical fire extinguisher. Do NOT use water on fire where molten metal is present.

**Protective Actions for Fire-fighters:** In fire conditions, wear a NIOSH/MSHA-approved self-contained breathing apparatus and full protective gear. Use water spray to keep fire-exposed containers cool.

**Specific Hazards:** During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Molten metals produce fume, vapor and/or dust that may be toxic and/or a respiratory irritant. Metal reacts with oxidizing agents.

**Section 6 Accidental Release Measures**

**Personal Precautions:** Evacuate personnel to safe area. Use proper personal protective equipment as indicated in Section 8. Provide adequate ventilation.

**Environmental Precautions:** Avoid runoff into storm sewers and ditches which lead to waterways.

**Containment and Cleanup:** Recover for reuse if not contaminated. Remove all sources of ignition. Sweep or vacuum up and place in a suitable container for proper disposal. Wash spill area with soap and water.

**Section 7 Handling & Storage**

Read label on container before using. Do not wear contact lenses when working with chemicals. Keep container tightly closed. Keep out of reach of children. Use with adequate ventilation. Wash thoroughly after handling.

**Handling:** Use with adequate ventilation. Avoid contact with eyes, skin and clothing. Avoid ingestion. Do not inhale fumes from molten metals. Wash thoroughly after handling. Remove and wash clothing before reuse.

**Storage:** Store in a cool, dry, well-ventilated area away from incompatible substances.

**Section 8 Exposure Controls / Personal Protection**

Exposure Limits:	Chemical Name	ACGIH (TLV)	OSHA (PEL)	NIOSH (REL)
	Copper, dusts and mists, as Cu	TWA: 1 mg/m <sup>3</sup>	TWA: 1 mg/m <sup>3</sup>	TWA: 1 mg/m <sup>3</sup>

**Engineering controls:** Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower and fire extinguishing material. Personnel should wear safety glasses, goggles, or faceshield, lab coat or apron, appropriate protective gloves. Use adequate ventilation to keep airborne concentrations low.

**Respiratory protection:** None should be needed in normal laboratory handling at room temperatures. If dusty conditions prevail, work in fume hood or wear a NIOSH/MSHA-approved respirator.

**Section 9 Physical & Chemical Properties**

**Appearance:** Solid. Red-brown, lustrous metal.  
Turns green on exposure to moist air.  
**Odor:** No odor.  
**Odor threshold:** Data not available.  
**pH:** Data not available.  
**Melting / Freezing point:** 1083°C (1981°F)  
**Boiling point:** 2595°C (4703°F)  
**Flash point:** Not applicable

**Evaporation rate ( = 1):** Not applicable  
**Flammability (solid/gas):** Not applicable  
**Explosion limits: Lower / Upper:** Not applicable  
**Vapor pressure (mm Hg):** 1 mm @ 1628°C  
**Vapor density (Air = 1):** Data not available  
**Relative density (Specific gravity):** 8.92 @ 20°C  
**Solubility(ies):** Insoluble

**Partition coefficient:** Data not available  
**Auto-ignition temperature:** Not applicable  
**Decomposition temperature:** Data not available.  
**Viscosity:** Data not available.  
**Molecular formula:** Cu  
**Molecular weight:** 63.55

**Section 10 Stability & Reactivity**

**Chemical stability:** Stable  
**Hazardous polymerization:** Will not occur.  
**Conditions to avoid:** Excessive temperatures and heat.  
**Incompatibilities with other materials:** Strong oxidizers may cause a violent reaction.  
**Hazardous decomposition products:** At temperatures above melting point, toxic fumes or vapors may be emitted.

**Section 11 Toxicological Information**

**Acute toxicity:** Data not available  
**Skin corrosion/irritation:** Data not available  
**Serious eye damage/irritation:** Data not available  
**Respiratory or skin sensitization:** Data not available  
**Germ cell mutagenicity:** Data not available  
**Carcinogenicity:** Data not available  
NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.  
IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.  
OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.  
**Reproductive toxicity:** Data not available  
**STOT-single exposure:** Data not available  
**STOT-repeated exposure:** Data not available  
**Aspiration hazard:** Data not available  
**Potential health effects:**  
Inhalation: Inhalation of dust or fumes may irritate respiratory system. Symptoms include cough, headache, sore throat, shortness of breath.  
Ingestion: May be harmful if swallowed. Symptoms include abdominal pain, nausea, vomiting.  
Skin: May cause irritation and redness.  
Eyes: Contact with eyes may cause redness and pain.  
**Signs and symptoms of exposure:** Over-heating of alloy can produce metal fumes and oxides. Fumes of copper may cause metal fume fever with flu-like symptoms and skin and hair discolorization. Copper dust and fume cause irritation of the upper respiratory tract, metallic taste in the mouth, and nausea. Chronic poisoning results in Wilson's disease characterized by a hepatic cirrhosis, brain damage, demyelination, renal disease and copper deposition in the cornea.  
**Additional information:** RTECS #: GL5325000

**Section 12 Ecological Information**

**Toxicity to fish:** No data available  
**Toxicity to daphnia and other aquatic invertebrates:** No data available  
**Toxicity to algae:** No data available  
**Persistence and degradability:** No data available  
**Bioaccumulative potential:** No data available  
**Mobility in soil:** No data available  
**PBT and vPvB assessment:** No data available  
**Other adverse effects:** An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

**Section 13 Disposal Considerations**

These disposal guidelines are intended for the disposal of catalog-size quantities only. Federal regulations may apply to empty container. State and/or local regulations may be different. Dispose of in accordance with all local, state and federal regulations or contract with a licensed chemical disposal agency.

**Section 14 Transport Information**

**UN/NA number:** Not applicable  
**Shipping name:** Not Regulated  
**Hazard class:** Not applicable  
**Packing group:** Not applicable  
**Reportable Quantity:** No  
**Marine pollutant:** No  
**Exceptions:** Not applicable  
**2012 ERG Guide #:** Not applicable

**Section 15 Regulatory Information**

A chemical is considered to be listed if the CAS number for the anhydrous form is on the inventory list.

Component	TSCA	CERCLA (RQ)	RCRA code	DSL	NDSL	WHMIS Classification
Copper	Listed	Not listed	Not listed	Listed	Not listed	Uncontrolled product

**Section 16 Additional Information**

The information contained herein is furnished without warranty of any kind. Employers should use this information only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees. NTP: National Toxicology Program, IARC: International Agency for Research on Cancer, OSHA: Occupational Safety and Health Administration, STOT: Specific Target Organ Toxicity, SE: Single Exposure, RE: Repeated Exposure.

# Safety Data Sheet

Copper, Metal

**CAROLINA**<sup>®</sup>  
www.carolina.com

## Section 1 Product Description

**Product Name:** Copper, Metal  
**Recommended Use:** Science education applications  
**Synonyms:** Bronze powder, C.I. 77400; Arwood Copper, Copper Shot  
**Distributor:** Carolina Biological Supply Company  
2700 York Road, Burlington, NC 27215  
1-800-227-1150  
**Chemical Information:** 800-227-1150 (8am-5pm (ET) M-F)  
**Chemtrec:** 800-424-9300 (Transportation Spill Response 24 hours)

## Section 2 Hazard Identification

Classification of the chemical in accordance with paragraph (d) of §1910.1200;

**WARNING**



Very toxic to aquatic life.

**GHS Classification:**  
Hazardous to the aquatic environment - Acute Category 1

## Section 3 Composition / Information on Ingredients

<u>Chemical Name</u>	<u>CAS #</u>	<u>%</u>
Copper, Metal	7440-50-8	100

## Section 4 First Aid Measures

### Emergency and First Aid Procedures

**Inhalation:** In case of accident by inhalation: remove casualty to fresh air and keep at rest.  
**Eyes:** In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
**Ingestion:** If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

## Section 5 Firefighting Procedures

**Extinguishing Media:** Use media suitable to extinguish surrounding fire.  
**Fire Fighting Methods and Protection:** Firefighters should wear full protective equipment and NIOSH approved self-contained breathing apparatus.  
**Fire and/or Explosion Hazards:** Avoid Dusting. May become explosive when dispersed in air.  
**Hazardous Combustion Products:** Carbon dioxide, Carbon monoxide

## Section 6 Spill or Leak Procedures

Prevent the spread of any spill to minimize harm to human health and the environment if safe to do so. Wear complete and proper personal protective equipment following the recommendation of Section 8 at a minimum. Dike with suitable absorbent material like granulated clay. Gather and store in a sealed container pending a waste disposal evaluation. Collect spillage.



# Safety Data Sheet

## Section 7

## Handling and Storage

**Handling:** Avoid release to the environment.  
**Storage:** Keep container tightly closed in a cool, well-ventilated place.  
**Storage Code:** Green - general chemical storage

## Section 8

## Protection Information

<b>Chemical Name</b>	<b>ACGIH</b>		<b>OSHA PEL</b>	
	<b>(TWA)</b>	<b>(STEL)</b>	<b>(TWA)</b>	<b>(STEL)</b>
Copper, Metal	0.2 mg/m <sup>3</sup> TWA (fume)	N/A	0.1 mg/m <sup>3</sup> TWA (fume); 1 mg/m <sup>3</sup> TWA (dust and mist)	N/A

### Control Parameters

#### Engineering Measures:

No exposure limits exist for the constituents of this product. General room ventilation might be required to maintain operator comfort under normal conditions of use.

#### Personal Protective Equipment (PPE):

Lab coat, apron, eye wash, safety shower.

#### Respiratory Protection:

No respiratory protection required under normal conditions of use.

#### Eye Protection:

Wear chemical splash goggles when handling this product. Have an eye wash station available.

#### Skin Protection:

Avoid skin contact by wearing chemically resistant gloves, an apron and other protective equipment depending upon conditions of use. Inspect gloves for chemical break-through and replace at regular intervals. Clean protective equipment regularly. Wash hands and other exposed areas with mild soap and water before eating, drinking, and when leaving work.

#### Gloves:

No information available

## Section 9

## Physical Data

**Formula:** Cu  
**Molecular Weight:** 63.55  
**Appearance:** Metallic Red - Orange Foil  
Solid  
**Odor:** No data available  
**Odor Threshold:** No data available  
**pH:** No data available  
**Melting Point:** 1083 C  
**Boiling Point:** 2595 C  
**Flash Point:** No data available  
**Flammable Limits in Air:** N/A

**Vapor Pressure:** 0 hPa at 1400 °C  
**Evaporation Rate (BuAc=1):** N/A  
**Vapor Density (Air=1):** N/A

**Specific Gravity:** 8.94  
**Solubility in Water:** Practically Insoluble  
**Log Pow (calculated):** No data available  
**Autoignition Temperature:** No data available  
**Decomposition Temperature:** No data available  
**Viscosity:** No data available  
**Percent Volatile by Volume:** 0%

## Section 10

## Reactivity Data

**Reactivity:** No data available  
**Chemical Stability:** Stable under normal conditions.  
**Conditions to Avoid:** None known. Avoid creating and inhaling dust. Keep away from oxidizing materials and strong acids. Store in a cool dry place. Isolate from incompatible materials.  
**Hazardous Polymerization:** Will not occur

## Section 11

## Toxicity Data

**Routes of Entry:** Inhalation, ingestion, eye or skin contact.  
**Symptoms (Acute):** N/A  
**Delayed Effects:** No data available

### Acute Toxicity:

<b>Chemical Name</b>	<b>CAS Number</b>	<b>Oral LD50</b>	<b>Dermal LD50</b>	<b>Inhalation LC50</b>
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# Safety Data Sheet

Copper, Metal 7440-50-8 Oral LD50 Mouse > 5000 mg/kg Not determined Not determined

**Carcinogenicity:**  
**Chemical Name** No data available  
**CAS Number** 7440-50-8  
**IARC** Not listed  
**NTP** Not listed  
**OSHA** Not listed

**Chronic Effects:**  
**Mutagenicity:** No evidence of a mutagenic effect.  
**Teratogenicity:** No evidence of a teratogenic effect (birth defect).  
**Sensitization:** No evidence of a sensitization effect.  
**Reproductive:** No evidence of negative reproductive effects.  
**Target Organ Effects:**  
**Acute:** See Section 2  
**Chronic:** Not listed as a carcinogen by IARC, NTP or OSHA., Reproductive data cited., Tumorigenic data cited.

## Section 12 Ecological Data

**Overview:** This material is not expected to be harmful to the ecology.  
**Mobility:** No data  
**Persistence:** No data  
**Bioaccumulation:** No data  
**Degradability:** No data  
**Other Adverse Effects:** No data

<b>Chemical Name</b>	<b>CAS Number</b>	<b>Eco Toxicity</b>
Copper, Metal	7440-50-8	96 HR LC50 PIMEPHALES PROMELAS 0.0068 - 0.0156 MG/L 96 HR LC50 PIMEPHALES PROMELAS < 0.3 MG/L [STATIC] 96 HR LC50 LEPOMIS MACROCHIRUS 1.25 MG/L [STATIC] 96 HR LC50 CYPRINUS CARPIO 0.8 MG/L [STATIC] 48 HR EC50 DAPHNIA MAGNA 0.03 MG/L [STATIC]

## Section 13 Disposal Information

**Disposal Methods:** Dispose in accordance with all applicable Federal, State and Local regulations. Always contact a permitted waste disposer (TSD) to assure compliance.  
**Waste Disposal Code(s):** Not Determined

## Section 14 Transport Information

**Ground - DOT Proper Shipping Name:** N/A  
**Air - IATA Proper Shipping Name:** Not regulated for air transport by IATA.

## Section 15 Regulatory Information

**TSCA Status:** All components in this product are on the TSCA Inventory.

<b>Chemical Name</b>	<b>CAS Number</b>	<b>§ 313 Name</b>	<b>§ 304 RQ</b>	<b>CERCLA RQ</b>	<b>§ 302 TPQ</b>	<b>CAA 112(2) TQ</b>
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# Safety Data Sheet

Copper, Metal	7440-50-8	Copper	5000 lb (2270 kg) final RQ (no reporting of releases of this hazardous substance is required if the diameter of the pieces of the solid metal released is >100 µm).	No	No	No
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## Section 16

## Additional Information

Revised: 10/13/2015

Replaces: 10/13/2015

Printed: 10-29-2015

The information provided in this (Material) Safety Data Sheet represents a compilation of data drawn directly from various sources available to us. Carolina Biological Supply makes no representation or guarantee as to the suitability of this information to a particular application of the substance covered in the (Material) Safety Data Sheet.

### Glossary

ACGIH	American Conference of Governmental Industrial Hygienists	NTP	National Toxicology Program
CAS	Chemical Abstract Service Number	OSHA	Occupational Safety and Health Administration
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act	PEL	Permissible Exposure Limit
DOT	U.S. Department of Transportation	ppm	Parts per million
IARC	International Agency for Research on Cancer	RCRA	Resource Conservation and Recovery Act
N/A	Not Available	SARA	Superfund Amendments and Reauthorization Act
		TLV	Threshold Limit Value
		TSCA	Toxic Substances Control Act
		IDLH	Immediately dangerous to life and health



# Fisher Scientific

Part of Thermo Fisher Scientific

## SAFETY DATA SHEET

Creation Date 28-Jul-2014

Revision Date 28-Jul-2014

Revision Number 1

**Product Name** Copper, Powder (Laboratory)

**Cat No. :** C434-500

**Synonyms** None.

**Recommended Use** Laboratory chemicals.

**Uses advised against** No Information available

Details of the supplier of the safety data sheet

**Company**  
Fisher Scientific  
One Reagent Lane  
Fair Lawn, NJ 07410  
Tel: (201) 796-7100

**Emergency Telephone Number**  
CHEMTREC®, Inside the USA: 800-424-9300  
CHEMTREC®, Outside the USA: 001-703-527-3887

### Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Flammable solids	Category 2
Skin Corrosion/Irritation	Category 2
Serious Eye Damage/Eye Irritation	Category 2
Specific target organ toxicity (single exposure)	Category 3
Target Organs - Respiratory system.	

### Label Elements

**Signal Word**  
Warning

**Hazard Statements**  
Flammable solid  
Causes skin irritation  
Causes serious eye irritation  
May cause respiratory irritation



**Precautionary Statements**

**Prevention**

Wash face, hands and any exposed skin thoroughly after handling  
 Wear protective gloves/protective clothing/eye protection/face protection  
 Avoid breathing dust/fume/gas/mist/vapors/spray  
 Use only outdoors or in a well-ventilated area  
 Keep away from heat/sparks/open flames/hot surfaces. - No smoking  
 Ground/bond container and receiving equipment  
 Use explosion-proof electrical/ventilating/lighting/equipment

**Inhalation**

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing  
 Call a POISON CENTER or doctor/physician if you feel unwell

**Skin**

IF ON SKIN: Wash with plenty of soap and water  
 If skin irritation occurs: Get medical advice/attention  
 Take off contaminated clothing and wash before reuse

**Eyes**

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
 If eye irritation persists: Get medical advice/attention

**Fire**

In case of fire: Use CO2, dry chemical, or foam for extinction

**Storage**

Store in a well-ventilated place. Keep container tightly closed  
 Store locked up

**Disposal**

Dispose of contents/container to an approved waste disposal plant

**Hazards not otherwise classified (HNOC)**

Very toxic to aquatic life with long lasting effects



Component	CAS-No	Weight %
Copper	7440-50-8	100



<b>Eye Contact</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Obtain medical attention.
<b>Skin Contact</b>	Wash off immediately with plenty of water for at least 15 minutes. Get medical attention if symptoms occur.
<b>Inhalation</b>	Move to fresh air. If breathing is difficult, give oxygen. Get medical attention if symptoms occur.
<b>Ingestion</b>	Do not induce vomiting. Obtain medical attention.
<b>Most important symptoms/effects</b>	No information available.
<b>Notes to Physician</b>	Treat symptomatically



**Suitable Extinguishing Media** Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

<b>Unsuitable Extinguishing Media</b>	No information available
<b>Flash Point Method -</b>	Not applicable No information available
<b>Autoignition Temperature</b>	No information available
<b>Explosion Limits</b>	
<b>Upper</b>	No data available
<b>Lower</b>	No data available
<b>Sensitivity to Mechanical Impact</b>	No information available
<b>Sensitivity to Static Discharge</b>	No information available

**Specific Hazards Arising from the Chemical**

Flammable. Dust can form an explosive mixture in air. Fine dust dispersed in air may ignite. Thermal decomposition can lead to release of irritating gases and vapors. Keep product and empty container away from heat and sources of ignition.

**Hazardous Combustion Products**

Copper oxides

**Protective Equipment and Precautions for Firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

**NFPA**

<b>Health</b> 2	<b>Flammability</b> 2	<b>Instability</b> 1	<b>Physical hazards</b> N/A
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<b>Personal Precautions</b>	Use personal protective equipment. Remove all sources of ignition. Avoid dust formation. Avoid contact with skin, eyes and clothing.
<b>Environmental Precautions</b>	Should not be released into the environment. See Section 12 for additional ecological information.
<b>Methods for Containment and Clean Up</b>	Remove all sources of ignition. Sweep up or vacuum up spillage and collect in suitable container for disposal. Avoid dust formation.

<b>Handling</b>	Wear personal protective equipment. Ensure adequate ventilation. Use spark-proof tools and explosion-proof equipment. Keep away from open flames, hot surfaces and sources of ignition. Avoid contact with skin, eyes and clothing. Avoid ingestion and inhalation.
<b>Storage</b>	Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat and sources of ignition. Flammables area.

**Exposure Guidelines**

Component	ACGIH TLV	OSHA PEL	NIOSH IDLH
Copper	TWA: 0.2 mg/m <sup>3</sup> TWA: 1 mg/m <sup>3</sup>	(Vacated) TWA: 0.1 mg/m <sup>3</sup> TWA: 0.1 mg/m <sup>3</sup> TWA: 1 mg/m <sup>3</sup>	IDLH: 100 mg/m <sup>3</sup> TWA: 1 mg/m <sup>3</sup> TWA: 0.1 mg/m <sup>3</sup>
Component	Quebec	Mexico OEL (TWA)	Ontario TWA EV
Copper	TWA: 0.2 mg/m <sup>3</sup> TWA: 1 mg/m <sup>3</sup>	TWA: 0.2 mg/m <sup>3</sup> TWA: 1 mg/m <sup>3</sup> STEL: 2 mg/m <sup>3</sup>	TWA: 0.2 mg/m <sup>3</sup> TWA: 1 mg/m <sup>3</sup>

**Legend**

**ACGIH** - American Conference of Governmental Industrial Hygienists

**OSHA** - Occupational Safety and Health Administration

**NIOSH IDLH**: The National Institute for Occupational Safety and Health Immediately Dangerous to Life or Health

<b>Engineering Measures</b>	Ensure adequate ventilation, especially in confined areas. Use explosion-proof electrical/ventilating/lighting/equipment. Ensure that eyewash stations and safety showers are close to the workstation location.
<b><u>Personal Protective Equipment</u></b>	
<b>Eye/face Protection</b>	Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.
<b>Skin and body protection</b>	Wear appropriate protective gloves and clothing to prevent skin exposure.
<b>Respiratory Protection</b>	Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.
<b>Hygiene Measures</b>	Handle in accordance with good industrial hygiene and safety practice.

<b>Physical State</b>	Powder Solid
<b>Appearance</b>	Red brown
<b>Odor</b>	Odorless
<b>Odor Threshold</b>	No information available
<b>pH</b>	No information available
<b>Melting Point/Range</b>	1083 °C / 1981.4 °F
<b>Boiling Point/Range</b>	2595 °C / 4703 °F
<b>Flash Point</b>	Not applicable
<b>Evaporation Rate</b>	No information available
<b>Flammability (solid,gas)</b>	No information available
<b>Flammability or explosive limits</b>	
<b>Upper</b>	No data available
<b>Lower</b>	No data available
<b>Vapor Pressure</b>	1 mmHg @ 1628 °C
<b>Vapor Density</b>	No information available
<b>Relative Density</b>	8.92
<b>Solubility</b>	Insoluble in water
<b>Partition coefficient; n-octanol/water</b>	No data available
<b>Autoignition Temperature</b>	No information available
<b>Decomposition temperature</b>	No information available
<b>Viscosity</b>	No information available
<b>Molecular Formula</b>	Cu
<b>Molecular Weight</b>	63.54

<b>Reactive Hazard</b>	None known, based on information available
<b>Stability</b>	Moisture sensitive. Air sensitive.
<b>Conditions to Avoid</b>	Avoid dust formation. Incompatible products. Exposure to air. Exposure to moisture. Keep away from open flames, hot surfaces and sources of ignition.
<b>Incompatible Materials</b>	Strong oxidizing agents
<b>Hazardous Decomposition Products</b>	Copper oxides
<b>Hazardous Polymerization</b>	Hazardous polymerization does not occur.
<b>Hazardous Reactions</b>	None under normal processing.

**Acute Toxicity**

<b>Product Information</b>	No acute toxicity information is available for this product
<b>Component Information</b>	
<b>Toxicologically Synergistic Products</b>	No information available
<b><u>Delayed and immediate effects as well as chronic effects from short and long-term exposure</u></b>	

**Irritation** Irritating to eyes, respiratory system and skin

**Sensitization** No information available

**Carcinogenicity** The table below indicates whether each agency has listed any ingredient as a carcinogen.

Component	CAS-No	IARC	NTP	ACGIH	OSHA	Mexico
Copper	7440-50-8	Not listed	Not listed	Not listed	Not listed	Not listed

**Mutagenic Effects** No information available

**Reproductive Effects** No information available.

**Developmental Effects** No information available.

**Teratogenicity** No information available.

**STOT - single exposure** Respiratory system

**STOT - repeated exposure** None known

**Aspiration hazard** No information available

**Symptoms / effects, both acute and delayed** No information available

**Endocrine Disruptor Information** No information available

**Other Adverse Effects** The toxicological properties have not been fully investigated.

#### **Ecotoxicity**

Do not empty into drains.

Component	Freshwater Algae	Freshwater Fish	Microtox	Water Flea
Copper	0.0426-0.0535 mg/L EC50 72 h 0.031-0.054 mg/L EC50 96 h	Onchorhynchys mykiss: LC50=0.15 mg/L 96h Cuprinus carpio: LC50=0.8 mg/L 96h	Not listed	0.03 mg/L EC50 = 48 h

**Persistence and Degradability** No information available

**Bioaccumulation/ Accumulation** No information available.

**Mobility** No information available.

#### **Waste Disposal Methods**

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

#### **DOT**

UN-No UN3089  
 Proper Shipping Name METAL POWDERS, FLAMMABLE, N.O.S.  
 Proper technical name (COPPER)  
 Hazard Class 4.1  
 Packing Group III

#### **TDG**

UN-No UN3089  
 Proper Shipping Name METAL POWDERS, FLAMMABLE, N.O.S.  
 Hazard Class 4.1  
 Packing Group III

#### **IATA**

UN-No UN3089



Proper Shipping Name	METAL POWDERS, FLAMMABLE, N.O.S.
Hazard Class	4.1
Packing Group	III
<b>IMDG/IMO</b>	
UN-No	UN3089
Proper Shipping Name	METAL POWDERS, FLAMMABLE, N.O.S.
Hazard Class	4.1
Packing Group	III

All of the components in the product are on the following Inventory lists: Australia X = listed China Canada Europe TSCA Korea Philippines

#### International Inventories

Component	TSCA	DSL	NDSL	EINECS	ELINCS	NLP	PICCS	ENCS	AICS	IECSC	KECL
Copper	X	X	-	231-159-6	-		X	-	X	X	X

#### Legend:

X - Listed

E - Indicates a substance that is the subject of a Section 5(e) Consent order under TSCA.

F - Indicates a substance that is the subject of a Section 5(f) Rule under TSCA.

N - Indicates a polymeric substance containing no free-radical initiator in its Inventory name but is considered to cover the designated polymer made with any free-radical initiator regardless of the amount used.

P - Indicates a commenced PMN substance

R - Indicates a substance that is the subject of a Section 6 risk management rule under TSCA.

S - Indicates a substance that is identified in a proposed or final Significant New Use Rule

T - Indicates a substance that is the subject of a Section 4 test rule under TSCA.

XU - Indicates a substance exempt from reporting under the Inventory Update Rule, i.e. Partial Updating of the TSCA Inventory Data Base Production and Site Reports (40 CFR 710(B)).

Y1 - Indicates an exempt polymer that has a number-average molecular weight of 1,000 or greater.

Y2 - Indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants that comprises one of the eligibility criteria for the exemption rule.

#### U.S. Federal Regulations

TSCA 12(b) Not applicable

#### SARA 313

Component	CAS-No	Weight %	SARA 313 - Threshold Values %
Copper	7440-50-8	100	1.0

#### SARA 311/312 Hazardous Categorization

Acute Health Hazard	Yes
Chronic Health Hazard	No
Fire Hazard	Yes
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

#### Clean Water Act

Component	CWA - Hazardous Substances	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants
Copper	-	-	X	X

Clean Air Act Not applicable

OSHA Occupational Safety and Health Administration  
Not applicable

#### CERCLA

Component	Hazardous Substances RQs	CERCLA EHS RQs
Copper	5000 lb	-

#### California Proposition 65

This product does not contain any Proposition 65 chemicals

## State Right-to-Know

Component	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Copper	X	X	X	X	X

## U.S. Department of Transportation

Reportable Quantity (RQ): N  
 DOT Marine Pollutant N  
 DOT Severe Marine Pollutant Y

## U.S. Department of Homeland Security

This product does not contain any DHS chemicals.

Other International Regulations

Mexico - Grade No information available

## Canada

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR

WHMIS Hazard Class B4 Flammable solid  
 D2B Toxic materials



Prepared By Regulatory Affairs  
 Thermo Fisher Scientific  
 Email: EMSDS.RA@thermofisher.com

Creation Date 28-Jul-2014

Revision Date 28-Jul-2014

Print Date 28-Jul-2014

Revision Summary This document has been updated to comply with the US OSHA HazCom 2012 Standard replacing the current legislation under 29 CFR 1910.1200 to align with the Globally Harmonized System of Classification and Labeling of Chemicals (GHS)

## Disclaimer

The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of SDS

# SAFETY DATA SHEET

## 1. Product identification

TRADE NAME (AS LABELED): CRAFT SMART ACRYLICS  
PART NUMBER: CS120 - CS198  
SKU#: 231834-231839; 231922-231926; 231928-231931; 231934-231975; 231979-231981;  
231986-232022; 232024-232033; 232044-232046; 232048-232051  
UPC#: -  
PRODUCT USE: Acrylic Paint  
CHEMICAL NAME: Mixture  
CHEMICAL FAMILY: Acrylic Paint  
MANUFACTURER'S NAME: DECOART, INC.  
ADDRESS: 49 Cotton Ave  
Stanford, KY 40484  
EMERGENCY PHONE: (800) 424-9300 CHEMTREC  
BUSINESS PHONE: (606) 365-3193  
FAX NUMBER: (606) 365-9739  
DATE OF PREPARATION: October 5, 2015

## 2. Hazard identification

**EMERGENCY OVERVIEW:** **Product Description:** This product is a liquid with a mild odor. **Health Hazards:** This material is not expected to cause adverse health effects in normal applications and use. **Flammability Hazards:** This product is a non flammable liquid. **Reactivity Hazards:** Non reactive. **Environmental Hazards:** The environmental effects of this product are not known. This product is not expected to cause adverse environmental effects. **Emergency Considerations:** Emergency responders must wear the proper personal protective equipment (and have appropriate fire-suppression equipment) suitable for the situation to which they are responding.

### EU LABELING AND CLASSIFICATION:

Classification of the substance or mixture according to Regulation (EC) No1272/2008

Index# - These substances are not classified in Annex I of Directive 67/548/EEC

**GHS Classification:** None

**Components Contributing to Hazard:**

-

**Hazard Statement(s):**

None

**Precautionary Statement(s):**

None

**EU Hazard Classification per Directive 1999/45/EC:**

-

Risk Phrase None

Safety Phrase None

### HEALTH HAZARDS OR RISKS FROM EXPOSURE:

**PRIMARY ROUTES(S) OF ENTRY:** Eye Contact, Ingestion, and Skin Contact

#### ACUTE:

**EYE HAZARDS:** This product not expected to cause eye irritation if it enters the eyes.

**SKIN HAZARDS:** Not expected to cause irritation with normal handling.

**INGESTION HAZARDS:** Not expected to be a normal route of entry

**INHALATION HAZARDS:** No hazards expected.

**CONDITIONS AGGRAVATED BY EXPOSURE:** None expected. Maintain housekeeping and personal hygiene to minimize exposure.

**CONDITIONS AGGRAVATED BY OVEREXPOSURE:** None expected

#### CHRONIC:

None Known

## 3. Composition and information on ingredients

# SAFETY DATA SHEET

Hazardous Ingredients	CAS #	EINECS #	ICSC #	WT #	Hazard Symbol Risk Phrases
Water	7732-18-5	231-791-2	Not Listed	<48%	HAZARD CLASSIFICATION: NONE RISK PHRASES: NONE
Nepheline Syenite	37244-96-5	Not Listed in ESIS	Not Listed	<25%	None
Calcined Kaolin	66402-68-4	Not Listed	Not Listed	<25%	HAZARD CLASSIFICATION: NONE RISK PHRASES: NONE
Acrylate Polymer Solution	28205-96-1	Not Listed	Not Listed	<20%	HAZARD CLASSIFICATION: NONE RISK PHRASES: NONE
Ground Limestone	1317-65-3	215-279-6	Not Listed	<15%	HAZARD CLASSIFICATION: NONE RISK PHRASES: NONE
Non-Hazardous Colorants	Non-Hazardous Mixture	Not Listed	Not Listed	<10%	HAZARD CLASSIFICATION: NONE RISK PHRASES: NONE
Titanium Oxide	13463-67-7	236-675-5	0338	<5%	HAZARD CLASSIFICATION: NONE RISK PHRASES: NONE
Propylene Glycol	57-55-6	200-338-0	0321	<3%	HAZARD CLASSIFICATION: NONE RISK PHRASES: NONE
Balance of other ingredients are non-hazardous or less than 1% in concentration (or 0.1% for carcinogens, reproductive toxins, or respiratory sensitizers)					

**NOTE:**

ALL WHMIS required information is included in appropriate sections based on the ANSI Z400.1-2010 format. This product has been classified in accordance with the hazard criteria of the CPR and the SDS contains all the information required by the CPR, EU Directives and the Japanese Industrial Standard JIS Z 7250: 2000. This material is classified as hazardous under OSHA regulations 29 CFR 1910.1200.

## 4. First-aid measures

Contaminated individuals of chemical exposure must be taken for medical attention if any adverse effect occurs. Rescuers should be taken for medical attention, if necessary. Take copy of label and SDS to health professional with contaminated individual.

**SKIN EXPOSURE:** Wash with soap and water. If discomfort occurs or persists, contact a physician immediately.

**EYE EXPOSURE:** Immediately flush eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention if irritation persists.

**INHALATION:** If breathing becomes difficult remove contaminated individual to fresh air. If victim is not breathing provide artificial respiration. Seek medical attention immediately.

**INGESTION:** If this product is swallowed, CALL PHYSICIAN OR POISON CONTROL CENTER FOR MOST CURRENT INFORMATION. If professional advice is not available, do not induce vomiting. Never induce vomiting or give diluents (milk or water) to someone who is unconscious, having convulsions, or unable to swallow.

**RECOMMENDATIONS TO PHYSICIANS:** Treat symptoms and eliminate overexposure.

## 5. Fire-fighting measures

# SAFETY DATA SHEET

**FLASH POINT:** Non-Flammable

**AUTOIGNITION TEMPERATURE:** Not Applicable

**FLAMMABLE LIMITS (in air by volume, %):** Lower NA; Upper NA

**FIRE EXTINGUISHING MATERIALS:** Use agent most appropriate to extinguishing surrounding fire.

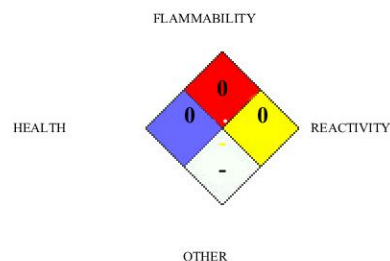
**UNUSUAL FIRE AND EXPLOSION HAZARDS:** None Known

Explosion Sensitivity to Mechanical Impact: Not Sensitive

Explosion Sensitivity to Static Discharge: Not Sensitive

**SPECIAL FIRE-FIGHTING PROCEDURES:** Incipient fire responders should wear eye protection. Structural firefighters must wear Self-Contained Breathing Apparatus and full protective equipment. Isolate materials not yet involved in the fire and protect personnel. Move containers from fire area if this can be done without risk; otherwise, cool with carefully applied water spray. If possible, prevent runoff water from entering storm drains, bodies of water, or other environmentally sensitive areas.

## NFPA RATING



Hazard Scale: 0 = Minimal 1 = Slight  
2 = Moderate  
3 = Serious 4 = Severe

## 6. Accidental release measures

**SPILL AND LEAK RESPONSE:** Absorb spill with inert material (e.g. vermiculite, sand, or earth), then place in suitable container for disposal. Clean up spills immediately, observing precautions.

US Regulations (CERCLA) require reporting spills and releases to soil, water and air in excess of reportable quantities. The toll free number for the US Coast Guard National Response Center is (800) 424-8802.

**DISPOSAL:** Dispose of in accordance with applicable Federal, State, and local procedures (see Section 13, Disposal Considerations).

## 7. Handling and storage

**WORK PRACTICES AND HYGIENE PRACTICES:** Do not eat, drink, smoke, or apply cosmetics while handling this product.

**STORAGE AND HANDLING PRACTICES:** Store in a tightly sealed container. Store in a cool, dry, well ventilated area. Protect from physical damage.

## 8. Exposure controls - personal protection

**VENTILATION AND ENGINEERING CONTROLS:** Use with adequate ventilation to ensure exposure levels are maintained below the limits provided below. Use local exhaust ventilation, and process enclosure if necessary, to control airborne dust. Ensure eyewash/safety shower stations are available near areas where this product is used.

### EXPOSURE LIMITS/GUIDELINES

Component Name:	CAS #	ACGIH TLVs	OSHA-PELs	NIOSH-TLVs	Other
Water	7732-18-5	Not Listed	Not Listed	Not Listed	Not Listed
Nepheline Syenite	37244-96-5	Not Listed	Not Listed	Not Listed	Not Listed
Calcined Kaolin	66402-68-4	Not Listed	Not Listed	Not Listed	Not Listed
Acrylate Polymer Solution	28205-96-1	Not Listed	Not Listed	Not Listed	Not Listed
Ground Limestone	1317-65-3	Not Listed	Not Listed	Not Listed	Not Listed
Non-Hazardous Colorants	Non-Hazardous Mixture	Not Listed	Not Listed	Not Listed	Not Listed
Titanium Oxide	13463-67-7	Not Listed	Not Listed	Not Listed	Not Listed
Propylene Glycol	57-55-6	Not Listed	Not Listed	Not Listed	Not Listed

International exposure limits may be established for the components of this product. Please check with competent authority in each country for the most recent limits in place.

The following information on appropriate Personal Protective Equipment is provided to assist employers in complying with OSHA regulations found in 29 CFR Subpart I (beginning at 1910.132) or equivalent standard of Canada, or standards of EU member states (including EN 149 for respiratory PPE, and EN 166 for face/eye protection), and those of Japan. Please reference applicable regulations and standards for relevant details.

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**RESPIRATORY PROTECTION:** Not required with normal use. If necessary, use only respiratory protection authorized in the U.S. Federal OSHA Respiratory Protection Standard (29 CFR 1910.134), equivalent U.S. State standards, Canadian CSA standard Z94.4-93, the European Standard EN149, or EU member states.

**EYE PROTECTION:** Not normally required however, safety glasses are recommended as appropriate to prevent eye contact. If necessary, refer to U.S. OSHA 29 CFR 1910.133, Canadian Standards, and the European Standard EN166, Australian Standards, or relevant Japanese Standards.

**HAND PROTECTION:** Not required under normal use. If desired, wear rubber gloves to prevent skin contact. If necessary, refer to U.S. OSHA 29 CFR 1910.138, the European Standard DIN EN 374, the appropriate Standards of Canada, Australian Standards, or relevant Japanese Standards.

**BODY PROTECTION:** Not required under normal use. Wear appropriate clothing sufficient to prevent skin contact. If necessary, refer to appropriate Standards of Canada, or appropriate Standards of the EU, Australian Standards, or relevant Japanese Standards.

## 9. Physical and chemical properties

**VAPOR DENSITY:** Not Available

**SPECIFIC GRAVITY @ 20°C:** Not Available

**VAPOR PRESSURE:** Not Available

**FREEZING POINT:** Not Available

**ODOR THRESHOLD:** Mild

**APPEARANCE, ODOR and COLOR:** This product is a liquid with a mild odor.

**EVAPORATION RATE (n-BuAc=1):** Not Available

**SOLUBILITY IN WATER:** Not Available

**pH:** Not Available

**BOILING POINT:** Not Available

## 10. Stability and reactivity

**STABILITY:** Stable

**DECOMPOSITION PRODUCTS:** Carbon Monoxide and Carbon Dioxide

**MATERIALS WITH WHICH SUBSTANCE IS INCOMPATIBLE:** None Known

**HAZARDOUS POLYMERIZATION:** Will Not Occur.

**CONDITIONS TO AVOID:** None Known

## 11. Toxicological information

### **TOXICITY DATA:**

**Routes of Entry:** Eye contact, Ingestion, Skin Contact

No LD50/LC50 information found relating to normal routes of occupational exposures.

**SUSPECTED CANCER AGENT:** None of the ingredients are found on the following lists: FEDERAL OSHA Z LIST, NTP, CAL/OSHA, IARC and therefore is not considered to be, nor suspected to be a cancer-causing agent by these agencies.

**IRRITANCY OF PRODUCT:** This product not known to cause irritation.

**SENSITIZATION TO THE PRODUCT:** These products are not known to cause human skin or respiratory sensitization.

**REPRODUCTIVE TOXICITY INFORMATION:** Listed below is information concerning the effects of this product and its components on the human reproductive system.

**Mutagenicity:** The components of this product are not reported to produce mutagenic effects in humans.

**Embryotoxicity:** The components of this product are not reported to produce embryotoxic effects in humans.

**Teratogenicity:** The components of this product are not reported to produce teratogenicity effects in humans.

**Reproductive Toxicity:** The components of this product are not reported to produce reproductive effects in humans.

## 12. Ecological information

ALL WORK PRACTICES MUST BE AIMED AT ELIMINATING ENVIRONMENTAL CONTAMINATION.

**ECOTOXICITY:** Not available.

**BOD5 and COD:** Not available.

**PRODUCTS OF BIODEGRADATION:** Not available

**TOXICITY OF THE PRODUCTS OF BIODEGRADATION:** Not available

**ENVIRONMENTAL STABILITY:** Controls should be engineered to prevent release to the environment, including procedures to prevent spills, atmospheric release and release to waterways

**BIOACCUMULATION/ACCUMULATION:** These products have not been tested for bio-accumulation potential.

## 13. Disposal considerations

**PREPARING WASTES FOR DISPOSAL:** Waste disposal must be in accordance with appropriate U.S. Federal, State, and local regulations, those of Canada, Australia, EU Member States and Japan.

## 14. Transportation information

### **US DOT, IATA, IMO, ADR:**

**Domestic (Land, D.O.T.)**

Proper Shipping Name: Non-Regulated Material

# SAFETY DATA SHEET

Hazard Class: Non Hazardous - Non Regulated

**International (Water, I.M.O.)**

Proper Shipping Name: Non-Regulated Material

Hazard Class: Non Hazardous - Non Regulated

**International (Air, I.C.A.O.)**

Proper Shipping Name: Non-regulated Material

Hazard Class: Non Hazardous - Non Regulated

U.S. DEPARTMENT OF TRANSPORTATION (DOT) SHIPPING REGULATIONS: This product is not classified as dangerous goods, per U.S. DOT regulations, under 49 CFR 172.101. Non-Regulated

TRANSPORT CANADA, TRANSPORTATION OF DANGEROUS GOODS REGULATIONS: These products are not classified as Dangerous Goods, per regulations of Transport Canada.

INTERNATIONAL AIR TRANSPORT ASSOCIATION (IATA): These products are not classified as Dangerous Goods, by rules of IATA

INTERNATIONAL MARITIME ORGANIZATION (IMO) DESIGNATION: These products are not classified as Dangerous Goods by the International Maritime Organization.

EUROPEAN AGREEMENT CONCERNING THE INTERNATIONAL CARRIAGE OF DANGEROUS GOODS BY ROAD (ADR): These products are classified by the United Nations Economic Commission for Europe to be dangerous goods

## 15. Regulatory information

### UNITED STATES REGULATIONS:

U.S. SARA REPORTING REQUIREMENTS: The components of this product are not subject to the reporting requirements of Sections 302, 304, and 313 of Title III of the Superfund Amendments and Reauthorization Act.

U.S. SARA THRESHOLD PLANNING QUANTITY: There are no specific Threshold Planning Quantities for any component of these products. The default Federal SDS submission and inventory requirement filing threshold of 10,000 lb (4,540 kg) therefore applies, per 40 CFR 370.20.

U.S. CERCLA REPORTABLE QUANTITY (RQ): None

U.S. TSCA INVENTORY STATUS: The components of this product are listed in the TSCA Inventory.

CALIFORNIA SAFE DRINKING WATER AND TOXIC ENFORCEMENT ACT (PROPOSITION 65): This product does not contain any component above the 0.1% level which is listed as a California Proposition 65 chemical.

### CANADIAN REGULATIONS:

CANADIAN DSL/NDL INVENTORY STATUS: The components of this product are not on the DSL Inventory.

CANADIAN ENVIRONMENTAL PROTECTION ACT (CEPA) PRIORITIES SUBSTANCES LISTS: No component of this product is on the CEPA First Priorities Substance Lists.

CANADIAN WHMIS CLASSIFICATION and SYMBOLS: Not Classified

### EUROPEAN ECONOMIC COMMUNITY INFORMATION:

Classification of the substance or mixture according to Regulation (EC) No1272/2008

Index# - These substances are not classified in Annex I of Directive 67/548/EEC

-

Risk Phrase None

Safety Phrase None

### AUSTRALIAN INFORMATION FOR PRODUCT:

AUSTRALIAN INVENTORY OF CHEMICAL SUBSTANCES (AICS) STATUS: The components of this product are listed on the AICS or are exempt.

STANDARD FOR THE UNIFORM SCHEDULING OF DRUGS AND POISONS: Not applicable.

### JAPANESE INFORMATION FOR PRODUCT:

JAPANESE MINISTER OF INTERNATIONAL TRADE AND INDUSTRY (MITI) STATUS: The components of this product are not listed as Class I Specified Chemical Substances, Class II Specified Chemical Substances, or Designated Chemical Substances by the Japanese MITI.

### INTERNATIONAL CHEMICAL INVENTORIES:

Listing of the components on individual country Chemical Inventories is as follows:

Asia-Pac: Listed or exempt

Australian Inventory of Chemical Substances (AICS): Listed or exempt

Korean Existing Chemicals List (ECL): Listed or exempt

Japanese Existing National Inventory of Chemical Substances (ENCS): Listed or exempt

Philippines Inventory of Chemicals and Chemical Substances (PICCS): Listed or exempt

Swiss Giftliste List of Toxic Substances: Listed or exempt

U.S. TSCA: Listed or exempt

## 16. Other information

**PREPARED BY:** DecoArt, Inc

**DATE OF PRINTING:** October 5, 2015

# SAFETY DATA SHEET

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.



## Safety Data Sheet

### 1. Identification of Material and Supplier

<b>GHS Product Identifier</b>	<b>CRAFTSMART LIQUID GLOSS (PART A – RESIN)</b>
<b>Product Code</b>	SH985
<b>Company Name</b>	Modern Teaching Aids
<b>Address</b>	Level 1 122-126 Old Pittwater Road Brookvale NSW Australia
<b>Telephone/Fax Number</b>	Phone: 1800 251 497 Fax: 1800 151 492
<b>Emergency Phone Number</b>	24 hours
<b>Recommended use of the chemical and restrictions on use</b>	Craftsmart Liquid Gloss Part A Resin component used in conjunction with Craftsmart Liquid Gloss Part B Hardener to form an epoxy resin system that provides a tough, durable and high gloss coating.
<b>Other Information</b>	This SDS summarises to the best of our knowledge the health and safety hazard information of the product and how to safely handle and use the product in the workplace.

### 2. Hazards Identification

**Classification of the substance or mixture**  
Hazardous according to the criteria of Safe Work Australia.

<b>GHS Classification:</b>	<b>Hazard Class</b>	<b>Hazard Category</b>
	Skin irritation	Category 2
	Serious eye irritation	Category 2A
	Skin sensitizer	Category 1
	Germ cell mutagenicity	Category 2
	Acute hazards to the aquatic environment	Category 2
	Chronic hazards to the aquatic environment	Category 2

**Hazard pictogram(s)**



**Signal word**                      Warning

**Hazard statement(s):**

- H315 Causes skin irritation.
- H317 May cause an allergic skin reaction.
- H319 Causes serious eye irritation.
- H341 Suspected of causing genetic defects.
- H411 Toxic to aquatic life with long lasting effects.

**Precautionary Statement(s):**

**Prevention:**

- P201 Obtain special instructions before use.
- P202 Do not handle until all safety precautions have been read and understood.
- P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
- P264 Wash hands thoroughly after handling.
- P272 Contaminated work clothing should not be allowed out of the workplace.
- P273 Avoid release to the environment.
- P280 Wear protective gloves/protective clothing/eye protection/face protection.

**Response:**

- P302+P352 IF ON SKIN: Wash with plenty of water.
- P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

# CRAFTSMART LIQUID GLOSS

## Safety Data Sheet

	P308+P313 IF exposed or concerned: Get medical advice/attention.
	P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
	P337+P313 If eye irritation persists: Get medical advice/attention.
	P362 Take off contaminated clothing.
	P39 Collect spillage.
<b>Storage:</b>	P405 Store locked up.
<b>Disposal:</b>	P501 Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations.

Classification of material Xn - Harmful Xi - Irritant N - Dangerous for the environment

### Risk phrases:

R36/38 Irritating to eyes and skin.  
 R43 May cause sensitisation by skin contact.  
 R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
 R68 Possible risk of irreversible effects.

### Safety phrases:

S24/25 Avoid contact with skin and eyes.  
 S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
 S28 After contact with skin, wash immediately with plenty of water.  
 S36/37 Wear suitable protective clothing and gloves.  
 S46 If swallowed, seek medical advice immediately and show this container or label.  
 S57 Use appropriate container to avoid environmental contamination.  
 S60 This material and its container must be disposed of as hazardous waste.

### Dangerous Goods information:

Not classified as Dangerous Goods according to the criteria of the Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG Code).

### Signal word:

HAZARDOUS

## 3. Composition/Information on Ingredients

### Identity of ingredients:

Chemical ingredients	CAS-No.	Proportion
Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <=700)	25068-38-6	> 60%
Trimethylolpropane triacrylate	15625-89-5	10 - 30%
2,3-epoxypropyl o-tolyl ether	2210-79-9	< 10%

## 4. First-Aid Measures

<b>Ingestion</b>	Rinse out mouth. Do not drink. Seek medical advice from a specialist.
<b>Skin</b>	Rinse with running water and soap. Seek medical advice.
<b>Eyes</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Seek medical advice.

## Safety Data Sheet

<b>Inhalation</b>	Move to fresh air, consult doctor if complaint persists.
<b>First Aid facilities</b>	Eye wash and safety shower. Normal washroom facilities.
<b>Medical attention and special treatment</b>	Treat symptomatically.

### 5. Fire-Fighting Measures

<b>Suitable extinguishing media</b>	Water spray (fog), foam, dry chemical or carbon dioxide
<b>Improper extinguishing agent</b>	High pressure waterjet .
<b>Decomposition products in case of fire</b>	Thermal decomposition can lead to release of irritating gases and vapours. Carbon monoxide. Carbon dioxide. Oxides of nitrogen.
<b>Special protective equipment for fire-fighters</b>	Wear self-contained breathing apparatus and full protective clothing, such as turn-out gear .
<b>Additional firefighting advice</b>	In case of fire, keep containers cool with water spray. Collect contaminated firefighting water separately. It must not enter drains.

### 6. Accidental Release Measures

<b>Personal precautions and emergency procedures</b>	Avoid contact with skin and eyes. See advice in Section 8.
<b>Environmental precautions:</b>	Do not empty into drains / surface water / ground water.
<b>Clean-up methods:</b>	Absorb spill with inert material. Shovel material into appropriate container for disposal. Dispose of contaminated material as waste according to Chapter 13. Wash spillage site thoroughly with soap and water or detergent solution.

### 7. Handling and Storage

<b>Precautions for safe handling</b>	Prolonged or repeated skin contact should be avoided to minimise any risk of sensitisation. Avoid contact with eyes, skin and clothing. See advice in chapter 8. For the Part A plus Part B adhesive mixture, follow curing schedule as recommended in product literature.
<b>Conditions for safe storage</b>	Keep in a cool, well ventilated area away from heat, sparks and open flame. Keep container tightly closed until ready for use.

### 8. Exposure Controls / Personal Protection

**National exposure standards:**

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None

**Engineering controls:** Ensure good ventilation/suction at the workplace.

**Eye protection:** Wear safety glasses with side shields.

**Skin protection:** Wear long sleeved shirt and long trousers.  
The use of chemical resistant gloves such as Neoprene or Natural Rubber are recommended

Please note that in practice the working life of chemical resistant gloves may be considerably reduced as a result of many influencing factors (e.g. temperature). Suitable risk assessment should be carried out by the end user. If signs of wear and tear are noticed then the gloves should be replaced.

**Respiratory protection:** If inhalation risk exists, wear a respirator or air supplied mask complying with the requirements of AS/NZS 1715 and AS/NZS 1716.

### 9. Physical and chemical properties

**Appearance:** colourless  
clear  
**Odour:** Epoxy  
**Flash point:** > 130 °C (> 266 °F)  
**Density:** 1.10 - 1.18 g/cm<sup>3</sup>  
**Solubility in water:** Insoluble

### 10. Stability and Reactivity

**Stability** Stable under normal conditions of temperature and pressure.

**Conditions to avoid** Avoid excessive heat and ignition sources.  
Avoid mixing resin (Part A) and curing agent (Part B) unless you plan to use immediately.

**Incompatible materials** Acids.  
Amines.  
Strong oxidizing agents.

**Hazardous decomposition products** Upon decomposition, this product emits carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.

**Hazardous polymerization** Rapid polymerization may generate excessive heat and pressure.  
Polymerization may occur at elevated temperature or in the presence of incompatible materials.

### 11. Toxicological Information

**Health Effects:**  
**Ingestion** Ingestion of large amounts may produce gastrointestinal disturbances including irritation, nausea, and diarrhea.

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<b>Skin</b>	Irritating to skin.
<b>Eyes</b>	Causes serious eye irritation. Symptoms may include severe irritation, pain, tearing, blurred vision.
<b>Inhalation</b>	Inhalation of vapours or mists of the product may be irritating to the respiratory system.
<b>Chronic effects</b>	Toxicological studies of an ingredient in this product have shown that prolonged exposure to high vapour concentration or ingestion of high dose may cause birth defects and decreased fertility in laboratory animals.
<b>Mutagenicity</b>	Category 2 (Mutagen), This product contains an ingredient which has been associated with mutagenicity effects.

<b>Acute toxicity:</b>						
Hazardous components CAS-No.	Value type	Value	Route of application	Exposure time	Species	Method
Reaction product: Bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight <=700) 25068-38-6	LD50	2,000 mg/kg	oral		rat	OECD Guideline 420 (Acute Oral Toxicity) OECD Guideline 402 (Acute Dermal Toxicity)
	LC50	2,000 mg/kg	dermal		rat	
Trimethylolpropane triacrylate 15625-89-5	LD50	>5,000 mg/kg	oral		rat	
	LD50	>2,000 mg/l	dermal		rat	
2,3-epoxypropyl o-tolyl ether 2210-79-9	LD50	2,000 mg/kg	oral		rat	
	LD50	2,000 mg/kg	dermal		rat	

<b>Skin corrosion/irritation:</b>				
Hazardous components CAS-No.	Result	Exposure time	Species	Method
Reaction product: Bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight <=700) 25068-38-6	moderately irritating	24 h	rabbit	Draize Test

<b>Serious eye damage/irritation:</b>				
Hazardous components CAS-No.	Result	Exposure time	Species	Method
Reaction product: Bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight <=700) 25068-38-6	Not irritating		rabbit	OECD Guideline 405 (Acute Eye Irritation/Corrosion)

<b>Respiratory or skin sensitization:</b>				
Hazardous components CAS-No.	Result	Test type	Species	Method
Reaction product: Bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight <=700) 25068-38-6	sensitizing	Mouse local lymphnode assay (LLNA)	mouse	OECD Guideline 429 (Skin Sensitisation: Local Lymph Node Assay)

<b>Germ cell mutagenicity:</b>					
Hazardous components CAS-No.	Result	Type of study/Route of	Metabolic activation/Exposure	Species	Method

## Safety Data Sheet

Reaction product: Bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <=700) 25068-38-6	Negative	administration Bacterial reverse mutation assay (e.g Ames test)	time With and without	OECD Guideline 472 (Genetic Toxicology: Escherichia coli, Reverse Mutation Assay)
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### Repeated dose toxicity:

Hazardous components CAS-No.	Result	Route of application	Exposure time/frequency of treatment	Species	Method
Reaction product: Bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight <=700) 25068-38-6	NOAEL=500 mg/kg	Oral: gavage	14 wdaily	rat	OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)

## 12. Ecological Information

### General ecological information

Do not empty into drains / surface water / ground water.

### Ecotoxicity

Toxic to aquatic life with long lasting effects.

### Toxicity:

Hazardous components CAS-No.	Value type	Value	Acute Toxicity Study	Exposure time	Species	Method
Reaction product: bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	LC50	1.75 mg/l	Fish	96 h	Oncorhynchus mykiss	OECD Guideline 203 (Fish, Acute Toxicity Test)
Reaction product: bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	EC50	9.4 mg/l	Algae	72 h	Scenedesmus capricornutum	OECD Guideline 201 (Alga, Growth Inhibition Test)
Reaction product: bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	NOEC	2.4 mg/l	Algae	72 h	Scenedesmus capricornutum	OECD Guideline 201 (Alga, Growth Inhibition Test)
Trimethylolpropane triacrylate 15625-89-5	LC50	1-2.2 mg/l	Fish	96 h	Leuciscus idus	OECD Guideline 203 (Fish, Acute Toxicity Test)
2,3-epoxypropyl o-tolyl ether 2210-79-9	LC50	7.5 mg/l	Fish	96 h	Oncorhynchus mykiss	OECD Guideline 203 (Fish, Acute Toxicity Test)
2,3-epoxypropyl o-tolyl ether 2210-79-9	EC50	3.3 mg/l	Daphnia	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)

### Persistence and degradability:

Hazardous components CAS-No.	Result	Route of application	Degradability	Method
Reaction product: bisphenol-A- (epichlorhydrin); epoxy resin		aerobic	5%	OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry)

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(number average molecular weight <= 700) 25068-38-6				Test)
Trimethylolpropane triacrylate 15625-89-5			>70%	OECD Guideline 302 B (Inherent biodegradability: Zahn-Wellens/EMPA Test)
Trimethylolpropane triacrylate 15625-89-5			>40%	OECD Guideline 301 E (Ready biodegradability: Modified OECD Screening Test)
2,3-epoxypropyl o-tolyl ether 2210-79-9		aerobic	11-17%	OECD 301 A - F

### 13. Disposal Considerations

**Waste disposal of product** Dispose of as hazardous waste in compliance with local and national regulations.

**Disposal for uncleaned package** Packaging that cannot be cleaned are to be disposed of in the same manner as the product.

### 14. Transport Information

#### Road and Rail Transport:

**Dangerous Goods information** Not classified as Dangerous Goods according to the criteria of the Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG Code).

#### Marine transport IMDG:

**UN no.** 3082  
**Proper shipping name** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Bisphenol-A Epichlorhydrin resin)  
**Class or division** 9  
**Packaging group** III  
**EmS** F-A ,S-F  
**Seawater pollutant** Marine pollutant

#### Air transport IATA:

**UN no.** 3082  
**Proper shipping name:** Environmentally hazardous substance, liquid, n.o.s. (Bisphenol-A Epichlorhydrin resin)  
**Class or division:** 9  
**Packaging group:** III  
**Packaging instructions (passenger)** 964  
**Packaging instructions (cargo)** 964

**Further information for transport:** The transport classifications in this section apply generally to packed and bulk goods alike. For containers with a net volume of no more than 5 L for liquid substances or a net mass of no more than 5 kg for solid substances per individual or inner package, the exemptions SP 375 (ADR), 197 (IATA), 969 (IMDG) may be applied, which can result in a deviation from the transport classification for packed goods.

### 15. Regulatory Information

**SUSDP Poisons Schedule** 5

**AICS** All components are listed or are exempt from listing on the Australian Inventory of Chemical Substances (AICS).

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<b>16. Other Information</b>
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<b>Date of preparation or last revision of SDS</b>	30/8/16
<b>Contact Person/Point</b>	CSA Trading Pty Ltd Phone: +61 3 9895 4333 (International) Fax: +61 3 9899 4519 (International)  Poisons Information Centre 13 11 26 (Australia) 0800 764 766 (New Zealand)

**Abbreviations and acronyms:**

ADGC: Australian Dangerous Goods Code

IMDG: International Maritime Code Dangerous Goods

IATA-DGR: International Air Transport Association



# CRAFTSMART LIQUID GLOSS

## Safety Data Sheet

### 1. Identification of Material and Supplier

<b>GHS Product Identifier</b>	<b>CRAFTSMART LIQUID GLOSS (PART B – HARDENER)</b>
<b>Product Code</b>	SH985
<b>Company Name</b>	Modern Teaching Aids
<b>Address</b>	Level 1 122-126 Old Pittwater Road Bookvale NSW Australia
<b>Telephone/Fax Number</b>	Phone: 1800 251 497 Fax: 1800 151 492
<b>Emergency Phone Number</b>	24 hours
<b>Recommended use of the chemical and restrictions on use</b>	Craftsmart Liquid Gloss Part B Hardener component used in conjunction with Craftsmart Liquid Gloss Part A Resin to form an epoxy resin system that provides a tough, durable and high gloss coating.
<b>Other Information</b>	This SDS summarises to the best of our knowledge the health and safety hazard information of the product and how to safely handle and use the product in the workplace.

### 2. Hazards Identification

**Classification of the substance or mixture**

Hazardous according to the criteria of Safe Work Australia.

**GHS Classification:**

<u>Hazard Class</u>	<u>Hazard Category</u>	<u>Route of Exposure</u>
Acute toxicity	Category 4	Oral
Acute toxicity	Category 4	Inhalation
Skin corrosion	Category 1B	
Serious eye damage/eye irritation	Category 1	
Skin sensitizer	Category 1	

**Hazard pictogram:**



**Signal word:**

DANGER

**Hazard Statement(s)**

H302+H332 Harmful if swallowed or if inhaled.  
H314 Causes severe skin burns and eye damage.  
H317 May cause an allergic skin reaction.

**Precautionary Statement(s):**

**Prevention:**

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.  
P264 Wash hands thoroughly after handling.  
P270 Do not eat, drink or smoke when using this product.  
P271 Use only outdoors or in a well-ventilated area.  
P272 Contaminated work clothing should not be allowed out of the workplace.  
P280 Wear protective gloves/protective clothing/eye protection/face protection.

**Response:**

P301+P312 IF SWALLOWED: Call a POISON CENTRE/doctor if you feel unwell.  
P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.  
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated

# CRAFTSMART LIQUID GLOSS

## Safety Data Sheet

clothing. Rinse skin with water/shower.

P304+P340+P310 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTRE or physician.

P305+P351+P338+P315 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get immediate medical advice/attention.

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

P363 Wash contaminated clothing before reuse.

**Storage:** P405 Store locked up.

**Disposal:** P501 Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations.

### Dangerous Goods information:

Not classified as Dangerous Goods according to the criteria of the Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG Code).

**Signal word:**  
HAZARDOUS

### 3. Composition/Information on Ingredients

**Type of preparation:** Hardener

#### Identity of ingredients:

<b>Chemical Ingredients</b>	<b>CAS-No.</b>	<b>Proportion</b>
Benzyl alcohol	100-51-6	30-60%
3-aminomethyl-3,5,5-trimethylcyclohexylamine	2855-13-2	10-30%
Non hazardous ingredients		30-60%

### 4. First-Aid Measures

**Ingestion:** Do not induce vomiting. Have victim rinse mouth thoroughly with water. Get immediate medical attention.

**Skin:** In case of contact, immediately remove contaminated clothing and flush skin with copious amounts of water. Get immediate medical attention.

**Eyes:** Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get immediate medical attention.

**Inhalation:** Move to fresh air. Keep warm and in a quiet place. Seek medical advice.

**First Aid facilities:** Eye wash & safety shower. Normal washroom facilities.

**Medical attention and special treatment:** Treat symptomatically.

### 5. Fire-Fighting Measures

## Safety Data Sheet

<b>Suitable extinguishing media:</b>	Carbon dioxide, foam, powder Fine water spray.
<b>Improper extinguishing agent:</b>	Water spray jet.
<b>Combustion behaviour:</b>	In case of fire toxic gases can be released.
<b>Decomposition products in case of fire:</b>	Thermal decomposition can lead to release of irritating gases and vapours. Carbon monoxide. Carbon dioxide. Oxides of nitrogen. Ammonia.
<b>Special protective equipment for fire fighters:</b>	Wear protective equipment. Fire fighters should wear positive pressure self-contained breathing apparatus (SCBA).
<b>Additional fire fighting advice:</b>	In case of fire, keep containers cool with water spray. Collect contaminated firefighting water separately. It must not enter drains.
<b>Hazchem code:</b>	2X

### 6. Accidental Release Measures

<b>Personal precautions:</b>	Remove sources of ignition. Danger of slipping on spilled product. Ensure adequate ventilation. Avoid skin and eye contact. Wear impervious gloves and chemical splash goggles.
<b>Environmental precautions:</b>	Do not empty into drains/surface water/ground water.
<b>Clean-up methods:</b>	Collect spilled material with an inert absorbent such as sand or vermiculite. Place in properly labelled closed container. Dispose of contaminated material as waste according to Section 13.

### 7. Handling and Storage

<b>Precautions for safe handling:</b>	For the Part A plus Part B adhesive mixture, follow curing schedule as recommended in product literature. Empty containers retain product residue, so obey hazard warnings and handle empty containers as if they were full. Do not cut, grind, weld, or drill on or near this container. Avoid breathing mists or aerosols of this product. Avoid contact with eyes, skin and clothing.
<b>Conditions for safe storage:</b>	Store in sealed original container. Store in a cool, dry place. Ensure that storage and workrooms are adequately ventilated. Keep away from heat and direct sunlight. Store away from incompatible materials.

### 8. Exposure Controls / Personal Protection

## Safety Data Sheet

<b>National exposure standards:</b>	None
<b>Engineering controls:</b>	Ensure good ventilation/suction at the workplace.
<b>Eye protection:</b>	For eye protection, use tightly fitted safety goggles and a face-shield.
<b>Skin protection:</b>	Use of protective coveralls and long sleeves is recommended. The use of nitrile-latex gloves is recommended. Please note that in practice the working life of chemical resistant gloves may be considerably reduced as a result of many influencing factors (e.g. temperature). Suitable risk assessment should be carried out by the end user. If signs of wear and tear are noticed then the gloves should be replaced.
<b>Respiratory protection:</b>	If inhalation risk exists, wear a respirator or air supplied mask complying with the requirements of AS/NZS 1715 and AS/NZS 1716.

### 9. Physical and chemical properties

<b>Appearance:</b>	colourless clear
<b>Odor:</b>	Characteristic
<b>Flash point:</b>	> 110 °C (> 230 °F)
<b>Density:</b>	1.00 - 1.10 g/cm <sup>3</sup>
<b>Solubility:</b>	slightly soluble

### 10. Stability and Reactivity

<b>Stability:</b>	Stable under normal conditions of temperature and pressure.
<b>Conditions to avoid:</b>	Heat, flames, sparks and other sources of ignition. Danger of decomposition if exposed to heat. Avoid mixing resin (Part A) and curing agent (Part B) unless you plan to use immediately.
<b>Incompatible materials:</b>	Reaction with epoxy resins and/or isocyanates in large amounts or under uncontrolled conditions releases considerable heat and may release acrid fumes. Oxidizing agents. Acids.
<b>Hazardous decomposition products:</b>	Thermal decomposition can lead to release of irritating gases and vapours. Carbon monoxide. Carbon dioxide. Oxides of nitrogen. Ammonia.
<b>Hazardous polymerization:</b>	Reaction with some curing agents may produce an exothermic reaction which in large masses could cause runaway polymerization.

### 11. Toxicological Information

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**Health Effects:**
**Ingestion:**

Harmful if swallowed.

Irritation and corrosive action can occur in the mouth, stomach tissue and digestive tract if swallowed.

**Skin:**

Corrosive to skin.

Symptoms may include redness, burning, drying, cracking and skin burns.

May cause skin sensitization.

**Eyes:**

Causes serious eye damage.

Contact with the eyes may cause moderate to severe eye injury. Eye contact may result in corneal injury. Symptoms may include discomfort or pain, excessive blinking and tear production, with marked redness and swelling of the conjunctiva.

**Inhalation:**

Harmful if inhaled.

Inhalation of vapours or mist can cause severe irritation, tissue and scarring of the respiratory tract.

**Acute toxicity:**

Hazardous components CAS-No.	Value type	Value	Route of application	Exposure time	Species	Method
Benzyl alcohol 100-51-6	LD50	1,620 mg/kg	oral inhalation inhalation	4 h	rat	Expert judgement
	Acute toxicity estimate (ATE)	4.17 mg/l			rat	
3-aminomethyl-3,5,5-trimethylcyclohexylamine 2855-13-2	LD50	1,030 mg/kg	oral inhalation	4 h	rat	OECD Guideline 403 (Acute Inhalation Toxicity)
	LC50	>5.01 mg/l			rat	

**Skin corrosion/irritation:**

Hazardous components CAS-No.	Result	Exposure time	Species	Method
Benzyl alcohol 100-51-6	Not irritating	4 h	rabbit	OECD Guideline 404 (Acute Dermal Irritation/Corrosion)

**Serious eye damage/irritation:**

Hazardous components CAS-No.	Result	Exposure time	Species	Method
Benzyl alcohol 100-51-6	Category II	24 h	rabbit	OECD Guideline 405 (Acute Eye Irritation/Corrosion)
3-aminomethyl-3,5,5-trimethylcyclohexylamine 2855-13-2	corrosive		rabbit	OECD Guideline 405 (Acute Eye Irritation/Corrosion)

**Respiratory or skin sensitization:**

Hazardous components CAS-No.	Result	Test type	Species	Method
Benzyl alcohol 100-51-6	Not sensitizing	Guinea pig maximisation test	guinea pig	Magnusson and Kligman Method
3-aminomethyl-3,5,5-trimethylcyclohexylamine 2855-13-2	Sensitizing	Guinea pig maximisation test	guinea pig	OECD Guideline 406 (Skin Sensitization)

**Germ cell mutagenicity:**

Hazardous components CAS-No.	Result	Type of study/Route of administration	Metabolic activation/Exposure time	Species	Method
Benzyl alcohol	Negative	Bacterial	With and without		

## Safety Data Sheet

100-51-6		reverse mutation assay (e.g Ames test)			
3-aminomethyl-3,5,5-trimethylcyclohexylamine 2855-13-2	Negative	Bacterial reverse mutation assay (e.g Ames test)	With and without		EU Method B.13/14 (Mutagenicity)

### Repeated dose toxicity:

Hazardous components CAS-No.	Result	Route of application	Exposure time/frequency of treatment	Species	Method
3-aminomethyl-3,5,5-trimethylcyclohexylamine 2855-13-2	LOAEL=<160 mg/kg	Oral: drinking water	13 weeks	rat	OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in rodents)
3-aminomethyl-3,5,5-trimethylcyclohexylamine 2855-13-2	NOAEL=<60 mg/kg	Oral: drinking water	13 weeks	rat	OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in rodents)

## 12. Ecological Information

**General ecological information:** Do not empty into drains/surface water/ground water.

### Toxicity:

Hazardous components CAS-No.	Value Type	Value	Acute Toxicity Study	Exposure time	Species	Method
Benzyl alcohol 100-51-6	LC50	646 mg/l	Fish	48 h	Leuciscus idus	DIN 38412-15
Benzyl alcohol 100-51-6	EC50	360 mg/l	Daphnia	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
Benzyl alcohol 100-51-6	EC50	640 mg/l	Algae	96 h	Scenedesmus quadricauda	OECD Guideline 201 (Alga, Growth Inhibition Test)
Benzyl alcohol 100-51-6	EC10	658 mg/l	Bacteria	17 h		
3-aminomethyl-3,5,5-trimethylcyclohexylamine 2855-13-2	LC50	110 mg/l	Fish	96 h	Leuciscus idus	EU Method C.1 (Acute Toxicity for Fish)
3-aminomethyl-3,5,5-trimethylcyclohexylamine 2855-13-2	EC50	42 mg/l	Daphnia	24 h	Daphnia magna	
3-aminomethyl-3,5,5-trimethylcyclohexylamine 2855-13-2	NOEC	1.5 mg/l	Algae	72 h	Scenedesmus subspicatus (new name: Desmodesmus subspicatus)	EU Method C.3 (Algal Inhibition Test)
3-aminomethyl-3,5,5-trimethylcyclohexylamine 2855-13-2	EC50	37 mg/l	Algae	72 h	Scenedesmus subspicatus (new name: Desmodesmus subspicatus)	EU Method C.3 (Algal Inhibition Test)
3-aminomethyl-3,5,5-trimethylcyclohexylamine 2855-13-2	EC10	1,120 mg/l	Bacteria	18 h		

### Persistence and degradability:

Hazardous components CAS-No.	Result	Route of application	Degradability	Method
Benzyl alcohol 100-51-6	readily biodegradable	aerobic	92-96%	OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I))
3-aminomethyl-3,5,5-trimethylcyclohexylamine 2855-13-2		aerobic	8%	OECD Guideline 301 A (new version) (Ready Biodegradability: DOC Die Away Test)

### Bioaccumulative potential/Mobility in soil:

Hazardous	LogKow	Bioconcentration	Exposure	Species	Temperature	Method

## Safety Data Sheet

components CAS-No.		factor (BCF)	time			
Benzyl alcohol 100-51-6	1.08					

### 13. Disposal Considerations

**Waste disposal of product:** Dispose of as hazardous waste in compliance with local and national regulations.  
Do not allow product to enter sewer or waterways.

**Disposal for uncleaned package:** Packaging that cannot be cleaned are to be disposed of in the same manner as the product.

### 14. Transport Information

#### Road and Rail Transport:

Dangerous Goods information: Classified as Dangerous Goods according to the criteria of the Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG Code).  
UN no.: 2289  
Proper shipping name: ISOPHORONEDIAMINE (solution)  
Class or division: 8  
Packaging group: III  
Hazchem code: 2X  
Emergency information: Refer to the Dangerous Goods - Initial Emergency Response Guide HB 76.

#### Marine transport IMDG:

UN no.: 2289  
Proper shipping name: ISOPHORONEDIAMINE (solution)  
Class or division: 8  
Packaging group: III  
EmS: F-A ,S-B  
Seawater pollutant: -

#### Air transport IATA:

UN no.: 2289  
Proper shipping name: Isophoronediamine (solution)  
Class or division: 8  
Packaging group: III  
Packaging instructions (passenger) 852  
Packaging instructions (cargo) 856

### 15. Regulatory Information

SUSDP Poisons Schedule: 5

### 16. Other Information

**Date of preparation** 22/9/16

## Safety Data Sheet

or last revision of SDS

### Contact Point

Poisons Information Centre  
13 11 26 (Australia)  
0800 764 766 (New Zealand)

### Abbreviations and acronyms:

ADGC: Australian Dangerous Goods Code  
IMDG: International Maritime Code Dangerous Goods  
TWA – Time Weighted Average



# Safety Data Sheet

Material Name: CRAYOLA® ACRYLIC PAINT; PORTFOLIO SERIES™

SDS ID: BNSSS187

## \*\*\*Section 1 - PRODUCT AND COMPANY IDENTIFICATION\*\*\*

Material Name: CRAYOLA® ACRYLIC PAINT; PORTFOLIO SERIES™

CRAYOLA LLC  
1100 Church Lane  
Easton, PA 18044  
support@crayola.com

Phone: 1-800-272-9652

Health Emergency - Call local Poison Control Center  
Transportation Emergency: 1-800-535-5053

### Synonyms

PORTFOLIO SERIES ACRYLIC PAINT; VARNISH; BEAD GLAZE; SPARKLE PAINT; GLAMOUR DUST; GLITTER GLAZE; PRODUCT COLORS/CODES: 20-4016; 20-4032; 100-PEARLESCENT MIXING; 113-LIGHT RED; 115-DEEP RED; 127-BURNT SIENA; 128-BURNT UMBER; 186-VIOLET; 244-IVORY BLACK; 300-DEEP MAGENTA; 313-LIGHT GREEN; 316-PHTHALO BLUE; 317-PHTHALO GREEN; 335-RED OXIDE; 381-BRILLIANT BLUE PURPLE; 411-LIGHT YELLOW; 432-TITANIUM WHITE; 434-UNBLEACHED TITANIUM; 500-MEDIUM MAGENTA; 530-BRONZE YELLOW; 570-BRILLANT BLUE; 590-BRILLANT PURPLE; 599-MEDIUM GRAY; 660-BRIGHT AQUA GREEN; 720-BRILLANT ORANGE; 730-TURNER'S YELLOW; 830-BRILLANT YELLOW; BIG YELLOW BOX 78-100; 78-1080; 78-1141; 78-1330; 78-1506; 78-1507; 78-1512; 78-1555; 04-1106; 04-1109; 04-1500; 04-1908; 04-1200; 04-1202; 04-1506; 04-1509; 04-1520; 04-1301; 20-1997; 94-1200; 94-1201; 94-1203; 94-1350; 04-1360; 94-3200; 94-3202; 94-4200; 94-4202; 94-4222; VARNISH 23-2436; 23-3301; 23-3302; 23-3303; 23-4087

### Product Use

Arts and Crafts

## \*\*\*Section 2 - HAZARDS IDENTIFICATION\*\*\*

### EMERGENCY OVERVIEW

**Color:** various colors  
**Physical Form:** liquid  
**Odor:** odorless

### POTENTIAL HEALTH EFFECTS

**Inhalation:** none  
**Skin Contact:** none  
**Eye Contact:** none  
**Ingestion:** none

## \*\*\*Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS\*\*\*

CAS	Component	Percent	Symbol(s)	Risk Phrase(s)
Not Available	Product has been certified as non-toxic by the art and creative materials institute, inc. and conforms to astm D-4236 standard practice for labeling art materials for acute and chronic adverse health hazards.	100	---	---

# Safety Data Sheet

Material Name: CRAYOLA® ACRYLIC PAINT; PORTFOLIO SERIES™

SDS ID: BNSSS187

## \*\*\*Section 4 - FIRST AID MEASURES\*\*\*

### Inhalation

It is unlikely that emergency treatment will be required. Remove from exposure. Get medical attention, if needed.

### Skin

It is unlikely that emergency treatment will be required. If adverse effects occur, wash with soap or mild detergent and large amounts of water. Get medical attention, if needed.

### Eyes

It is unlikely that emergency treatment will be required. Wash with large amounts of water or normal saline until no evidence of chemical remains (at least 15-20 minutes). Get medical attention immediately.

### Ingestion

Contact local poison control center or physician immediately.

## \*\*\*Section 5 - FIRE FIGHTING MEASURES\*\*\*

See Section 9 for Flammability Properties

**NFPA Ratings: Health: 1 Fire: 1 Reactivity: 0**

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

### Flammable Properties

Slight fire hazard.

### Extinguishing Media

regular dry chemical, carbon dioxide, water, regular foam

### Fire Fighting Measures

Move container from fire area if it can be done without risk. Avoid inhalation of material or combustion by-products.

## \*\*\*Section 6 - ACCIDENTAL RELEASE MEASURES\*\*\*

### Occupational spill/release

Absorb with sand or other non-combustible material. Collect spilled material in appropriate container for disposal.

## \*\*\*Section 7 - HANDLING AND STORAGE\*\*\*

### Storage Procedures

Store and handle in accordance with all current regulations and standards. See original container for storage recommendations. Keep separated from incompatible substances.

## \*\*\*Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION\*\*\*

### Component Exposure Limits

ACGIH and EU have not developed exposure limits for any of this product's components.

### Ventilation

Based on available information, additional ventilation is not required.

### PERSONAL PROTECTIVE EQUIPMENT

#### Eyes/Face

Eye protection not required under normal conditions.

#### Protective Clothing

Protective clothing is not required under normal conditions.

# Safety Data Sheet

Material Name: CRAYOLA® ACRYLIC PAINT; PORTFOLIO SERIES™

SDS ID: BNSSS187

## Glove Recommendations

Protective gloves are not required under normal conditions.

## Respiratory Protection

No respirator is required under normal conditions of use.

Under conditions of frequent use or heavy exposure, respiratory protection may be needed.

## \*\*\*Section 9 - PHYSICAL AND CHEMICAL PROPERTIES\*\*\*

<b>Physical State:</b>	Liquid	<b>Appearance:</b>	Not available
<b>Color:</b>	various colors	<b>Physical Form:</b>	liquid
<b>Odor:</b>	odorless	<b>Odor Threshold:</b>	Not available
<b>pH:</b>	Not available	<b>Melting Point:</b>	Not available
<b>Boiling Point:</b>	Not available	<b>Flash Point:</b>	No data available
<b>Evaporation Rate:</b>	Not available	<b>Vapor Pressure:</b>	Not available
<b>Vapor Density (air = 1):</b>	Not available	<b>Density:</b>	Not available
<b>Specific Gravity (water = 1):</b>	Not available	<b>Water Solubility:</b>	Not available
<b>Coeff. Water/Oil Dist:</b>	Not available	<b>Viscosity:</b>	Not available
<b>Volatility:</b>	Not available		

## \*\*\*Section 10 - STABILITY AND REACTIVITY\*\*\*

### Chemical Stability

Stable at normal temperatures and pressure.

### Conditions to Avoid

None reported.

### Materials to Avoid

oxidizing materials

### Decomposition Products

oxides of carbon

### Possibility of Hazardous Reactions

Will not polymerize.

## \*\*\*Section 11 - TOXICOLOGICAL INFORMATION\*\*\*

### Component Analysis - LD50/LC50

The components of this material have been reviewed in various sources and no selected endpoints have been identified.

### RTECS Acute Toxicity (selected)

The components of this material have been reviewed and RTECS publishes no data as of the date on this document.

### Component Carcinogenicity

None of this product's components are listed by ACGIH, IARC, or DFG.

### RTECS Irritation

The components of this material have been reviewed and RTECS publishes no data as of the date on this document.

# Safety Data Sheet

Material Name: CRAYOLA® ACRYLIC PAINT; PORTFOLIO SERIES™

SDS ID: BNSSS187

## \*\*\*Section 12 - ECOLOGICAL INFORMATION\*\*\*

### Component Analysis - Aquatic Toxicity

No LOLI ecotoxicity data are available for this product's components.

## \*\*\*Section 13 - DISPOSAL CONSIDERATIONS\*\*\*

### Disposal Methods

Dispose in accordance with all applicable regulations.

### Component Waste Numbers

The U.S. EPA has not published waste numbers for this product's components.

## \*\*\*Section 14 - TRANSPORT INFORMATION\*\*\*

### US DOT Information

Not regulated as a hazardous material.

### TDG Information

Not regulated as dangerous goods.

### ADR Information

Not regulated as dangerous goods.

### RID Information

Not regulated as dangerous goods.

### IATA Information

Not regulated as dangerous goods.

### ICAO Information

Not regulated as dangerous goods.

### IMDG Information

Not regulated as dangerous goods.

## \*\*\*Section 15 - REGULATORY INFORMATION\*\*\*

### Component Analysis

None of this products components are listed under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 311/312 (40 CFR 370.21), SARA Section 313 (40 CFR 372.65), CERCLA (40 CFR 302.4), TSCA 12(b), or require an OSHA process safety plan.

### SARA Section 311/312 (40 CFR 370 Subparts B and C)

Acute Health: No Chronic Health: No Fire: No Pressure: No Reactive: No

### Component Analysis - State

None of this product's components are listed on the state lists from CA, MA, MN, NJ or PA.

Not regulated under California Proposition 65

### Canada

This product has been classified in accordance with the criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

**WHMIS Classification:** Not a Controlled Product under Canada's Workplace Hazardous Material Information System.

# Safety Data Sheet

Material Name: CRAYOLA® ACRYLIC PAINT; PORTFOLIO SERIES™

SDS ID: BNSSS187

## Component Analysis - Inventory

No information is available.

### \*\*\*Section 16 - OTHER INFORMATION\*\*\*

#### Key / Legend

ACGIH - American Conference of Governmental Industrial Hygienists; ADR - European Road Transport; AU - Australia; BOD - Biochemical Oxygen Demand; C - Celsius; CA - Canada; CAS - Chemical Abstracts Service; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CN - China; CPR - Controlled Products Regulations; DFG - Deutsche Forschungsgemeinschaft; DOT - Department of Transportation; DSL - Domestic Substances List; EEC - European Economic Community; EINECS - European Inventory of Existing Commercial Chemical Substances; EPA - Environmental Protection Agency; EU - European Union; F - Fahrenheit; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; ICAO - International Civil Aviation Organization; IDL - Ingredient Disclosure List; IDLH - Immediately Dangerous to Life and Health; IMDG - International Maritime Dangerous Goods; JP - Japan; Kow - Octanol/water partition coefficient; KR - Korea; LEL - Lower Explosive Limit; LOLI - List Of Lists™ - ChemADVISOR's Regulatory Database; MAK - Maximum Concentration Value in the Workplace; MEL - Maximum Exposure Limits; NFPA - National Fire Protection Agency; NIOSH - National Institute for Occupational Safety and Health; NJTSR - New Jersey Trade Secret Registry; NTP - National Toxicology Program; NZ - New Zealand; OSHA - Occupational Safety and Health Administration; PH - Philippines; RCRA - Resource Conservation and Recovery Act; RID - European Rail Transport; RTECS - Registry of Toxic Effects of Chemical Substances®; SARA - Superfund Amendments and Reauthorization Act; STEL - Short-term Exposure Limit; TDG - Transportation of Dangerous Goods; TSCA - Toxic Substances Control Act; TWA - Time Weighted Average; UEL - Upper Explosive Limit; US - United States

End of Sheet BNSSS187

# Safety Data Sheet

Material Name: CRAYOLA® AIR DRY CLAY

SDS ID: 00230484

## \*\*\*Section 1 - PRODUCT AND COMPANY IDENTIFICATION\*\*\*

Material Name: CRAYOLA® AIR DRY CLAY

CRAYOLA LLC  
1100 Church Lane  
Easton, PA 18044  
support@crayola.com

Phone: 1-800-272-9652

Health Emergency - Call local Poison Control Center  
Transportation Emergency: 1-800-535-5053

### Synonyms

CAD CLAY; 04-1509; 57-4514; 57-4517; 57-5001; 57-5025; 57-5050; 57-5051; 57-5055; 57-5057; 57-5064

### Product Use

Arts and Crafts

## \*\*\*Section 2 - HAZARDS IDENTIFICATION\*\*\*

### EMERGENCY OVERVIEW

Physical Form: clay

Health Hazards: No significant target effects reported.

### POTENTIAL HEALTH EFFECTS

Inhalation: none

Skin Contact: none

Eye Contact: none

Ingestion: none

## \*\*\*Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS\*\*\*

CAS	Component	Percent	Symbol(s)	Risk Phrase(s)
Not Available	Product has been certified as non-toxic by the art and creative materials institute, inc. and conforms to astm D-4236 standard practice for labeling art materials for acute and chronic adverse health hazards.	100.0	---	---

## \*\*\*Section 4 - FIRST AID MEASURES\*\*\*

### Inhalation

It is unlikely that emergency treatment will be required. Remove from exposure. Get medical attention, if needed.

### Skin

It is unlikely that emergency treatment will be required. If adverse effects occur, wash with soap or mild detergent and large amounts of water. Get medical attention, if needed.

### Eyes

It is unlikely that emergency treatment will be required. Wash with large amounts of water or normal saline until no evidence of chemical remains (at least 15-20 minutes). Get medical attention immediately.

# Safety Data Sheet

Material Name: CRAYOLA® AIR DRY CLAY

SDS ID: 00230484

## Ingestion

Contact local poison control center or physician immediately.

### \*\*\*Section 5 - FIRE FIGHTING MEASURES\*\*\*

See Section 9 for Flammability Properties

NFPA Ratings: Health: 1 Fire: 1 Reactivity: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

## Flammable Properties

Slight fire hazard.

## Extinguishing Media

regular dry chemical, carbon dioxide, water, regular foam

## Fire Fighting Measures

Move container from fire area if it can be done without risk. Avoid inhalation of material or combustion by-products.

### \*\*\*Section 6 - ACCIDENTAL RELEASE MEASURES\*\*\*

## Occupational spill/release

Collect spilled material in appropriate container for disposal.

### \*\*\*Section 7 - HANDLING AND STORAGE\*\*\*

## Handling Procedures

Use methods to minimize dust.

## Storage Procedures

Store and handle in accordance with all current regulations and standards. See original container for storage recommendations. Keep separated from incompatible substances.

### \*\*\*Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION\*\*\*

## Component Exposure Limits

ACGIH and EU have not developed exposure limits for any of this product's components.

## Ventilation

Based on available information, additional ventilation is not required.

## PERSONAL PROTECTIVE EQUIPMENT

### Eyes/Face

Eye protection not required under normal conditions.

### Protective Clothing

Protective clothing is not required under normal conditions.

### Glove Recommendations

Protective gloves are not required under normal conditions.

### Respiratory Protection

No respirator is required under normal conditions of use.

### \*\*\*Section 9 - PHYSICAL AND CHEMICAL PROPERTIES\*\*\*

# Safety Data Sheet

Material Name: CRAYOLA® AIR DRY CLAY

SDS ID: 00230484

Physical State:	Solid	Appearance:	Not available
Physical Form:	clay	Odor:	Not Available
Odor Threshold:	Not available	Melting Point:	Not available
Boiling Point:	Not applicable	Vapor Pressure:	Not applicable
Vapor Density (air = 1):	Not applicable	Density:	Not available
Specific Gravity (water = 1):	Not available	Water Solubility:	Not available
Coeff. Water/Oil Dist:	Not available		

## \*\*\*Section 10 - STABILITY AND REACTIVITY\*\*\*

### Chemical Stability

Stable at normal temperatures and pressure.

### Conditions to Avoid

None reported.

### Materials to Avoid

oxidizing materials

### Decomposition Products

oxides of carbon

### Possibility of Hazardous Reactions

Will not polymerize.

## \*\*\*Section 11 - TOXICOLOGICAL INFORMATION\*\*\*

### Component Analysis - LD50/LC50

The components of this material have been reviewed in various sources and no selected endpoints have been identified.

### RTECS Acute Toxicity (selected)

The components of this material have been reviewed and RTECS publishes no data as of the date on this document.

### Component Carcinogenicity

None of this product's components are listed by ACGIH, IARC, or DFG.

### RTECS Irritation

The components of this material have been reviewed and RTECS publishes no data as of the date on this document.

## \*\*\*Section 12 - ECOLOGICAL INFORMATION\*\*\*

### Component Analysis - Aquatic Toxicity

No LOLI ecotoxicity data are available for this product's components.

## \*\*\*Section 13 - DISPOSAL CONSIDERATIONS\*\*\*

### Disposal Methods

Dispose in accordance with all applicable regulations.

### Component Waste Numbers

The U.S. EPA has not published waste numbers for this product's components.

## \*\*\*Section 14 - TRANSPORT INFORMATION\*\*\*

### US DOT Information

Not regulated as a hazardous material.



# Safety Data Sheet

Material Name: CRAYOLA® AIR DRY CLAY

SDS ID: 00230484

## TDG Information

Not regulated as dangerous goods.

## ADR Information

Not regulated as dangerous goods.

## RID Information

Not regulated as dangerous goods.

## IATA Information

Not regulated as dangerous goods.

## ICAO Information

Not regulated as dangerous goods.

## IMDG Information

Not regulated as dangerous goods.

## \* \* \*Section 15 - REGULATORY INFORMATION\* \* \*

### Component Analysis

None of this products components are listed under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 311/312 (40 CFR 370.21), SARA Section 313 (40 CFR 372.65), CERCLA (40 CFR 302.4), TSCA 12(b), or require an OSHA process safety plan.

### SARA Section 311/312 (40 CFR 370 Subparts B and C)

Acute Health: No Chronic Health: No Fire: No Pressure: No Reactive: No

### Component Analysis - State

None of this product's components are listed on the state lists from CA, MA, MN, NJ or PA.

The following statement(s) are provided under the California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65):

WARNING! This product contains a chemical known to the state of California to cause cancer.

### Canada

This product has been classified in accordance with the criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

**WHMIS Classification:** Not a Controlled Product under Canada's Workplace Hazardous Material Information System.

### EU Marking and Labelling

This material is not classified.

### Component Analysis - Inventory

No information is available.

# Safety Data Sheet

Material Name: CRAYOLA® AIR DRY CLAY

SDS ID: 00230484

## \*\*\*Section 16 - OTHER INFORMATION\*\*\*

### Key / Legend

ACGIH - American Conference of Governmental Industrial Hygienists; ADR - European Road Transport; AU - Australia; BOD - Biochemical Oxygen Demand; C - Celsius; CA - Canada; CAS - Chemical Abstracts Service; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CN - China; CPR - Controlled Products Regulations; DFG - Deutsche Forschungsgemeinschaft; DOT - Department of Transportation; DSL - Domestic Substances List; EEC - European Economic Community; EINECS - European Inventory of Existing Commercial Chemical Substances; EPA - Environmental Protection Agency; EU - European Union; F - Fahrenheit; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; ICAO - International Civil Aviation Organization; IDL - Ingredient Disclosure List; IDLH - Immediately Dangerous to Life and Health; IMDG - International Maritime Dangerous Goods; JP - Japan; Kow - Octanol/water partition coefficient; KR - Korea; LEL - Lower Explosive Limit; LOLI - List Of Lists™ - ChemADVISOR's Regulatory Database; MAK - Maximum Concentration Value in the Workplace; MEL - Maximum Exposure Limits; NFPA - National Fire Protection Agency; NIOSH - National Institute for Occupational Safety and Health; NJTSR - New Jersey Trade Secret Registry; NTP - National Toxicology Program; NZ - New Zealand; OSHA - Occupational Safety and Health Administration; PH - Philippines; RCRA - Resource Conservation and Recovery Act; RID - European Rail Transport; RTECS - Registry of Toxic Effects of Chemical Substances®; SARA - Superfund Amendments and Reauthorization Act; STEL - Short-term Exposure Limit; TDG - Transportation of Dangerous Goods; TSCA - Toxic Substances Control Act; TWA - Time Weighted Average; UEL - Upper Explosive Limit; US - United States

End of Sheet 00230484

# Safety Data Sheet

Material Name: CRAYOLA® MODEL MAGIC; MORPHIX; FUSION

SDS ID: BNSSS002

## \*\*\*Section 1 - PRODUCT AND COMPANY IDENTIFICATION\*\*\*

Material Name: CRAYOLA® MODEL MAGIC; MORPHIX; FUSION

CRAYOLA LLC  
1100 Church Lane  
Easton, PA 18044  
support@crayola.com

Phone: 1-800-272-9652

Health Emergency - Call local Poison Control Center  
Transportation Emergency: 1-800-535-5053

### Synonyms

CRAYOLA MODEL MAGIC; CRAYOLA MODEL MAGIC (CRAYOLA FLUFF STUFF); CRAYOLA NEON MODEL MAGIC; ART TUB; ART CASE; CRAYOLA MODEL MAGIC BUCKET; MODEL MAGIC PRESTO DOTS; FUSION; MORPHIX; PRODUCT COLORS/CODES: 03-1601; 03-4101; 03-4102; 03-4103; 03-4104; 03-4105; 03-4109; 03-4110; 03-4112; 03-4116; 03-4117; 03-4118; 04-1110; 04-1500; 04-1503; 04-1504; 04-1506; 04-1507; 04-1509; 04-1520; 04-1907; 04-1908; 04-1951; 04-2529;; 04-4106; 04-4107; 04-4108; 04-4115; 04-4401; 04-4600; 04-5358; 04-5692; 04-5719; 23-0017; 23-0025; 23-0219; 23-0220; 23-0792;; 23-2200; 23-2201; 23-2218; 23-2221; 23-2223; 23-2225; 23-2226; 23-2227; 23-2228; 23-2230; 23-2231; 23-2232; 23-2233; 23-2234; 23-2235; 23-2237; 23-2240; 23-2241; 23-2244; 23-2246; 23-2250; 23-2252; 23-2253; 23-2255; 23-2256; 23-2257; 23-2260; 23-2264; 23-2270; 23-2271; 23-2272; 23-2273; 23-2274; 23-2275; 23-2276; 23-2277; 23-2278; 23-2279; 23-2286; 23-2309; 23-2402; 23-2403; 23-2404; 23-2405; 23-2406; 23-2407; 23-2408; 23-2412; 23-2413; 23-2414; 23-2436; 23-2437; 23-2438; 23-2439; 23-2505; 23-2900; 23-3001; 23-3002; 23-3010; 23-3011; 23-3020; 23-3021; 23-3022; 23-3023; 23-3024; 23-3025; 23-3030; 23-3035; 23-3040; 23-3041; 23-3051; 23-3052; 23-3053; 23-3054; 23-3070; 23-3072; 23-3150; 23-3153; 23-3302; 23-3303; 23-3323; 23-3352; 23-4037; 23-4052; 23-4055; 23-4061; 23-4063; 23-4065; 23-4072; 23-4076; 23-4077; 23-4078; 23-4082; 23-4087; 23-6001; 23-6002; 23-6010; 23-6011; 23-6012; 23-6013; 23-6014; 23-6016; 23-6017; 23-6018; 23-3019; 23-6021; 23-6022; 23-6023; 23-6024; 23-6205; 23-6305; 23-6310; 57-2000; 57-4057; 57-4400; 57-4401; 57-4415; 57-4418; 57-4432; 57-4433; 57-4434; 57-4436; 57-4438; 57-4440; 57-4442; 57-4444; 57-4451; 57-4452; 57-4459; 57-4464; 57-4415; 57-4491; 57-4494; 57-4495; 57-4496; 57-4497; 57-4512; 57-4513; 57-6001; 94-4203

### Product Use

Arts and Crafts

## \*\*\*Section 2 - HAZARDS IDENTIFICATION\*\*\*

### EMERGENCY OVERVIEW

**Color:** white, various colors  
**Physical Form:** semi-solid gel  
**Odor:** faint odor

### POTENTIAL HEALTH EFFECTS

**Inhalation:** none  
**Skin Contact:** none  
**Eye Contact:** none  
**Ingestion:** none

# Safety Data Sheet

Material Name: CRAYOLA® MODEL MAGIC; MORPHIX; FUSION

SDS ID: BNSSS002

## \*\*\*Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS\*\*\*

CAS	Component	Percent	Symbol(s)	Risk Phrase(s)
Not Available	Product has been certified as non-toxic by the art and creative materials institute, inc. and conforms to astm D-4236 standard practice for labeling art materials for acute and chronic adverse health hazards.	100	---	---

## \*\*\*Section 4 - FIRST AID MEASURES\*\*\*

### Inhalation

It is unlikely that emergency treatment will be required. Remove from exposure. Get medical attention, if needed.

### Skin

It is unlikely that emergency treatment will be required. If adverse effects occur, wash with soap or mild detergent and large amounts of water. Get medical attention, if needed.

### Eyes

It is unlikely that emergency treatment will be required. Wash with large amounts of water or normal saline until no evidence of chemical remains (at least 15-20 minutes). Get medical attention immediately.

### Ingestion

Contact local poison control center or physician immediately.

## \*\*\*Section 5 - FIRE FIGHTING MEASURES\*\*\*

See Section 9 for Flammability Properties

**NFPA Ratings: Health: 1 Fire: 1 Reactivity: 0**

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

### Flammable Properties

Slight fire hazard.

### Extinguishing Media

regular dry chemical, carbon dioxide, water, regular foam

### Fire Fighting Measures

Move container from fire area if it can be done without risk. Avoid inhalation of material or combustion by-products.

## \*\*\*Section 6 - ACCIDENTAL RELEASE MEASURES\*\*\*

### Occupational spill/release

Collect spilled material in appropriate container for disposal.

## \*\*\*Section 7 - HANDLING AND STORAGE\*\*\*

### Handling Procedures

Use methods to minimize dust.

### Storage Procedures

Store and handle in accordance with all current regulations and standards. See original container for storage recommendations. Keep separated from incompatible substances.

# Safety Data Sheet

Material Name: CRAYOLA® MODEL MAGIC; MORPHIX; FUSION

SDS ID: BNSSS002

## \*\*\*Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION\*\*\*

### Component Exposure Limits

ACGIH and EU have not developed exposure limits for any of this product's components.

### Ventilation

Based on available information, additional ventilation is not required.

### PERSONAL PROTECTIVE EQUIPMENT

#### Eyes/Face

Eye protection not required under normal conditions.

#### Protective Clothing

Protective clothing is not required under normal conditions.

#### Glove Recommendations

Protective gloves are not required under normal conditions.

#### Respiratory Protection

No respirator is required under normal conditions of use.

## \*\*\*Section 9 - PHYSICAL AND CHEMICAL PROPERTIES\*\*\*

<b>Physical State:</b> Solid	<b>Appearance:</b> Not available
<b>Color:</b> white, various colors	<b>Physical Form:</b> semi-solid gel
<b>Odor:</b> faint odor	<b>Odor Threshold:</b> Not available
<b>pH:</b> 5.5 - 7.5	<b>Melting Point:</b> Not available
<b>Boiling Point:</b> Not applicable	<b>Vapor Pressure:</b> Not applicable
<b>Vapor Density (air = 1):</b> Not applicable	<b>Density:</b> Not available
<b>Specific Gravity (water = 1):</b> 0.4 - 1.9	<b>Water Solubility:</b> Not available
<b>Coef. Water/Oil Dist:</b> Not available	

## \*\*\*Section 10 - STABILITY AND REACTIVITY\*\*\*

### Chemical Stability

Stable at normal temperatures and pressure.

### Conditions to Avoid

None reported.

### Materials to Avoid

oxidizing materials

### Decomposition Products

oxides of carbon

### Possibility of Hazardous Reactions

Will not polymerize.

## \*\*\*Section 11 - TOXICOLOGICAL INFORMATION\*\*\*

### Component Analysis - LD50/LC50

The components of this material have been reviewed in various sources and no selected endpoints have been identified.

# Safety Data Sheet

Material Name: CRAYOLA® MODEL MAGIC; MORPHIX; FUSION

SDS ID: BNSSS002

## RTECS Acute Toxicity (selected)

The components of this material have been reviewed and RTECS publishes no data as of the date on this document.

## Component Carcinogenicity

None of this product's components are listed by ACGIH, IARC, or DFG.

## RTECS Irritation

The components of this material have been reviewed and RTECS publishes no data as of the date on this document.

## \*\*\*Section 12 - ECOLOGICAL INFORMATION\*\*\*

### Component Analysis - Aquatic Toxicity

No LOLI ecotoxicity data are available for this product's components.

## \*\*\*Section 13 - DISPOSAL CONSIDERATIONS\*\*\*

### Disposal Methods

Dispose in accordance with all applicable regulations.

### Component Waste Numbers

The U.S. EPA has not published waste numbers for this product's components.

## \*\*\*Section 14 - TRANSPORT INFORMATION\*\*\*

### US DOT Information

Not regulated as a hazardous material.

### TDG Information

Not regulated as dangerous goods.

### ADR Information

Not regulated as dangerous goods.

### RID Information

Not regulated as dangerous goods.

### IATA Information

Not regulated as dangerous goods.

### ICAO Information

Not regulated as dangerous goods.

### IMDG Information

Not regulated as dangerous goods.

## \*\*\*Section 15 - REGULATORY INFORMATION\*\*\*

### Component Analysis

None of this products components are listed under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 311/312 (40 CFR 370.21), SARA Section 313 (40 CFR 372.65), CERCLA (40 CFR 302.4), TSCA 12(b), or require an OSHA process safety plan.

### SARA Section 311/312 (40 CFR 370 Subparts B and C)

Acute Health: No Chronic Health: No Fire: No Pressure: No Reactive: No

### Component Analysis - State

None of this product's components are listed on the state lists from CA, MA, MN, NJ or PA.

# Safety Data Sheet

Material Name: CRAYOLA® MODEL MAGIC; MORPHIX; FUSION

SDS ID: BNSSS002

Not regulated under California Proposition 65

## Canada

This product has been classified in accordance with the criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

**WHMIS Classification:** Not a Controlled Product under Canada's Workplace Hazardous Material Information System.

## Component Analysis - Inventory

No information is available.

### \*\*\*Section 16 - OTHER INFORMATION\*\*\*

#### Key / Legend

ACGIH - American Conference of Governmental Industrial Hygienists; ADR - European Road Transport; AU - Australia; BOD - Biochemical Oxygen Demand; C - Celsius; CA - Canada; CAS - Chemical Abstracts Service; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CN - China; CPR - Controlled Products Regulations; DFG - Deutsche Forschungsgemeinschaft; DOT - Department of Transportation; DSL - Domestic Substances List; EEC - European Economic Community; EINECS - European Inventory of Existing Commercial Chemical Substances; EPA - Environmental Protection Agency; EU - European Union; F - Fahrenheit; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; ICAO - International Civil Aviation Organization; IDL - Ingredient Disclosure List; IDLH - Immediately Dangerous to Life and Health; IMDG - International Maritime Dangerous Goods; JP - Japan; Kow - Octanol/water partition coefficient; KR - Korea; LEL - Lower Explosive Limit; LOLI - List Of Lists™ - ChemADVISOR's Regulatory Database; MAK - Maximum Concentration Value in the Workplace; MEL - Maximum Exposure Limits; NFPA - National Fire Protection Agency; NIOSH - National Institute for Occupational Safety and Health; NJTSR - New Jersey Trade Secret Registry; NTP - National Toxicology Program; NZ - New Zealand; OSHA - Occupational Safety and Health Administration; PH - Philippines; RCRA - Resource Conservation and Recovery Act; RID - European Rail Transport; RTECS - Registry of Toxic Effects of Chemical Substances®; SARA - Superfund Amendments and Reauthorization Act; STEL - Short-term Exposure Limit; TDG - Transportation of Dangerous Goods; TSCA - Toxic Substances Control Act; TWA - Time Weighted Average; UEL - Upper Explosive Limit; US - United States

End of Sheet BNSSS002

# Safety Data Sheet

Material Name: CRAYOLA® PREMIER & ARTISTA II® TEMPERA PAINTS

SDS ID: BNSSS201

## \*\*\*Section 1 - PRODUCT AND COMPANY IDENTIFICATION\*\*\*

Material Name: CRAYOLA® PREMIER & ARTISTA II® TEMPERA PAINTS

### Manufacturer Information

CRAYOLA LLC  
1100 Church Lane  
Easton, PA 18044  
Mfg Contact: support@crayola.com

Phone: 1-800-272-9652

Emergency # 1-800-535-5053 or call local POISON CONTROL

### Synonyms

CRAYOLA PREMIER & ARTISTA II TEMPERA PAINTS; PRODUCT COLORS/CODES: CRAYOLA PREMIER TEMPERA- 54-1106, 54-1116, 54-1206, 54-1208, 54-1208G, 54-1208S, 54-1216, 54-1216G, 54-1216S, 54-1232, 54-1264,; ARTISTA II TEMPERA- 54-3115, 54-3115F (STANDARD & FLUORESCENT), 54-3128, 54-3132, 54-3164; BLACK, BLUE, BROWN, GOLD (CRAYOLA), GREEN, MAGENTA, ORANGE, PEACH, RED, SILVER (CRAYOLA), TURQUOISE BLUE, VIOLET, WHITE, YELLOW, FLUORESCENT BLUE, FLUORESCENT GREEN, FLUORESCENT PINK, FLUORESCENT RED, FLUORESCENT ORANGE-YELLOW, FLUORESCENT YELLOW, FLUORESCENT MAGENTA, FLUORESCENT ORANGE, FLUORESCENT ORANGE-RED, FLUORESCENT CHARTREUSE; 44-1997-0-042 BLUE; 44-1997-0-044 GREEN; BIG YELLOW BOX FRIENDS ON THE FLY-BUTTERFLIES (78-1240-0-000); FRIENDS ON THE FLY-SEA CREATURES (78-1250-0-000); JUST IN CHIME (78-1280-0-000); 54-3108, 54-3181, 54-3182, 54-3183; 54-8516, 54-8216; CRAYOLA PREMIER BLUE AND GREEN TEMPERA

### Product Use

Arts and Crafts

## \*\*\*Section 2 - HAZARDS IDENTIFICATION\*\*\*

### EMERGENCY OVERVIEW

**Color:** various colors

**Physical Form:** liquid

**Odor:** odorless

### POTENTIAL HEALTH EFFECTS

**Inhalation:** none

**Skin Contact:** none

**Eye Contact:** none

**Ingestion:** none

## \*\*\*Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS\*\*\*

CAS	Component	Percent	Symbol(s)	Risk Phrase(s)
Not Available	Product has been certified as non-toxic by the art and creative materials institute, inc. and conforms to astm D-4236 standard practice for labeling art materials for acute and chronic adverse health hazards.	100	---	---



# Safety Data Sheet

Material Name: CRAYOLA® PREMIER & ARTISTA II® TEMPERA  
PAINTS

SDS ID: BNSSS201

## \*\*\*Section 4 - FIRST AID MEASURES\*\*\*

### Inhalation

It is unlikely that emergency treatment will be required. Remove from exposure. Get medical attention, if needed.

### Skin

It is unlikely that emergency treatment will be required. If adverse effects occur, wash with soap or mild detergent and large amounts of water. Get medical attention, if needed.

### Eyes

It is unlikely that emergency treatment will be required. Wash with large amounts of water or normal saline until no evidence of chemical remains (at least 15-20 minutes). Get medical attention immediately.

### Ingestion

Contact local poison control center or physician immediately.

## \*\*\*Section 5 - FIRE FIGHTING MEASURES\*\*\*

See Section 9 for Flammability Properties

NFPA Ratings: Health: 1 Fire: 1 Reactivity: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

### Flammable Properties

Slight fire hazard.

### Extinguishing Media

regular dry chemical, carbon dioxide, water, regular foam

### Fire Fighting Measures

Move container from fire area if it can be done without risk. Avoid inhalation of material or combustion by-products.

## \*\*\*Section 6 - ACCIDENTAL RELEASE MEASURES\*\*\*

### Occupational spill/release

Absorb with sand or other non-combustible material. Collect spilled material in appropriate container for disposal.

## \*\*\*Section 7 - HANDLING AND STORAGE\*\*\*

### Storage Procedures

Store and handle in accordance with all current regulations and standards. See original container for storage recommendations. Keep separated from incompatible substances.

## \*\*\*Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION\*\*\*

### Component Exposure Limits

ACGIH and EU have not developed exposure limits for any of this product's components.

### Ventilation

Based on available information, additional ventilation is not required.

### PERSONAL PROTECTIVE EQUIPMENT

#### Eyes/Face

Eye protection not required under normal conditions.

#### Protective Clothing

Protective clothing is not required under normal conditions.

## Safety Data Sheet

Material Name: CRAYOLA® PREMIER & ARTISTA II® TEMPERA  
PAINTS

SDS ID: BNSSS201

### Glove Recommendations

Protective gloves are not required under normal conditions.

### Respiratory Protection

No respirator is required under normal conditions of use.

Under conditions of frequent use or heavy exposure, respiratory protection may be needed.

## \*\*\*Section 9 - PHYSICAL AND CHEMICAL PROPERTIES\*\*\*

<b>Physical State:</b>	Liquid	<b>Appearance:</b>	Not available
<b>Color:</b>	various colors	<b>Physical Form:</b>	liquid
<b>Odor:</b>	odorless	<b>Odor Threshold:</b>	Not available
<b>pH:</b>	Not available	<b>Melting Point:</b>	Not available
<b>Boiling Point:</b>	Not available	<b>Flash Point:</b>	No data available
<b>Evaporation Rate:</b>	Not available	<b>Vapor Pressure:</b>	Not available
<b>Vapor Density (air = 1):</b>	Not available	<b>Density:</b>	Not available
<b>Specific Gravity (water = 1):</b>	Not available	<b>Water Solubility:</b>	Not available
<b>Coeff. Water/Oil Dist:</b>	Not available	<b>Viscosity:</b>	Not available
<b>Volatility:</b>	Not available		

## \*\*\*Section 10 - STABILITY AND REACTIVITY\*\*\*

### Chemical Stability

Stable at normal temperatures and pressure.

### Conditions to Avoid

None reported.

### Materials to Avoid

oxidizing materials

### Decomposition Products

oxides of carbon

### Possibility of Hazardous Reactions

Will not polymerize.

## \*\*\*Section 11 - TOXICOLOGICAL INFORMATION\*\*\*

### Component Analysis - LD50/LC50

The components of this material have been reviewed in various sources and no selected endpoints have been identified.

### RTECS Acute Toxicity (selected)

The components of this material have been reviewed and RTECS publishes no data as of the date on this document.

### Component Carcinogenicity

None of this product's components are listed by ACGIH, IARC, or DFG.

### RTECS Irritation

The components of this material have been reviewed and RTECS publishes no data as of the date on this document.

# Safety Data Sheet

Material Name: CRAYOLA® PREMIER & ARTISTA II® TEMPERA  
PAINTS

SDS ID: BNSSS201

## \*\*\*Section 12 - ECOLOGICAL INFORMATION\*\*\*

### Component Analysis - Aquatic Toxicity

No LOLI ecotoxicity data are available for this product's components.

## \*\*\*Section 13 - DISPOSAL CONSIDERATIONS\*\*\*

### Disposal Methods

Dispose in accordance with all applicable regulations.

### Component Waste Numbers

The U.S. EPA has not published waste numbers for this product's components.

## \*\*\*Section 14 - TRANSPORT INFORMATION\*\*\*

### US DOT Information

No Classification assigned.

### TDG Information

No Classification assigned.

### ADR Information

No Classification assigned.

### RID Information

No Classification assigned.

### IATA Information

No Classification assigned.

### ICAO Information

No Classification assigned.

### IMDG Information

No Classification assigned.

## \*\*\*Section 15 - REGULATORY INFORMATION\*\*\*

### U.S. Federal Regulations

None of this products components are listed under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 311/312 (40 CFR 370.21), SARA Section 313 (40 CFR 372.65), CERCLA (40 CFR 302.4), TSCA 12(b), or require an OSHA process safety plan.

### SARA Section 311/312 (40 CFR 370 Subparts B and C)

Acute Health: No Chronic Health: No Fire: No Pressure: No Reactive: No

### U.S. State Regulations

None of this product's components are listed on the state lists from CA, MA, MN, NJ, PA, or RI.

Not regulated under California Proposition 65

### Canada

### Component Analysis - Inventory

No information is available.

## Safety Data Sheet

Material Name: CRAYOLA® PREMIER & ARTISTA II® TEMPERA  
PAINTS

SDS ID: BNSSS201

### \*\*\*Section 16 - OTHER INFORMATION\*\*\*

#### Key / Legend

ACGIH - American Conference of Governmental Industrial Hygienists; ADR - European Road Transport; AU - Australia; BOD - Biochemical Oxygen Demand; C - Celsius; CA - Canada; CAS - Chemical Abstracts Service; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CN - China; CPR - Controlled Products Regulations; DFG - Deutsche Forschungsgemeinschaft; DOT - Department of Transportation; DSL - Domestic Substances List; EEC - European Economic Community; EINECS - European Inventory of Existing Commercial Chemical Substances; EPA - Environmental Protection Agency; EU - European Union; F - Fahrenheit; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; ICAO - International Civil Aviation Organization; IDL - Ingredient Disclosure List; IDLH - Immediately Dangerous to Life and Health; IMDG - International Maritime Dangerous Goods; JP - Japan; Kow - Octanol/water partition coefficient; KR - Korea; LEL - Lower Explosive Limit; LOLI - List Of Lists™ - ChemADVISOR's Regulatory Database; MAK - Maximum Concentration Value in the Workplace; MEL - Maximum Exposure Limits; NFPA - National Fire Protection Agency; NIOSH - National Institute for Occupational Safety and Health; NJTSR - New Jersey Trade Secret Registry; NTP - National Toxicology Program; NZ - New Zealand; OSHA - Occupational Safety and Health Administration; PH - Philippines; RCRA - Resource Conservation and Recovery Act; RID - European Rail Transport; RTECS - Registry of Toxic Effects of Chemical Substances®; SARA - Superfund Amendments and Reauthorization Act; STEL - Short-term Exposure Limit; TDG - Transportation of Dangerous Goods; TSCA - Toxic Substances Control Act; TWA - Time Weighted Average; UEL - Upper Explosive Limit; US - United States

End of Sheet BNSSS201

# Safety Data Sheet

Material Name: CRAYOLA® WASHABLE PAINT

SDS ID: CRAY-034

## Section 1 - PRODUCT AND COMPANY IDENTIFICATION

### Material Name

CRAYOLA® WASHABLE PAINT

### Synonyms

CRAYOLA WASHABLE PAINT; CRAYOLA WASHABLE KIDS' PAINT; CRAYOLA WASHABLE FINGER PAINT; CRAYOLA PAINT MAKER; PAINT & CANVAS KIT; PRODUCT CODE(S): ): 03-3238; 03-3239; 03-7958; 04-0321; 04-0462; 04-0479; 04-0135; 04-0526; 04-0529; 04-0572; 04-0583; 04-1026; 04-1027; 04-1028; 04-1028; 04-1029; 04-1041; 04-1052; 04-1078; 04-1907; 04-1951; 04-2532; 04-2549; 04-4501; 04-5222; 04-5401; 04-5553; 04-5558; 04-8205; 04-5222; 04-5719; 04-5777; 04-6010; 04-6104; 04-6016; 04-6936; 44-1205-7; 44-2395; 54-0100; 54-0101; 54-0105; 54-0116; 54-0117; 54-0125; 54-0126; 54-0128; 54-0150; 54-0155; 54-0156; 54-0157; 04-0296; 54-1051; 54-1060; 54-1062; 54-1064; 54-1076; 54-1077; 54-1138; 54-1202; 54-1204; 54-1205; 54-1207; 54-1237; 54-1827; 54-1828; 54-1829; 54-1830; 54-1834; 54-1838; 54-1842; 54-1853; 54-208W; 54-2016; 54-2036; 54-2128; 54-2129; 54-2001; 54-2002; 54-2006; 54-2008; 54-2011; 54-2064; 54-2128; 54-2203; 54-2204; 54-2205; 54-2207; 54-2219; 54-2233; 54-2234; 54-2235; 54-2236; 54-2237; 54-2238; 54-2240; 54-2241; 54-2242; 54-2244; 54-2245; 54-2248; 54-2249; 54-2251; 54-2252; 54-2253; 54-2264; 54-2266; 54-2269; 54-2270; 54-2271; 54-2272; 54-2273; 54-2274; 54-2275; 54-2276; 54-2277; 54-2278; 54-2281; 54-2282; 54-2283; 54-2284; 54-2291; 54-2292; 54-2294; 54-2295; 54-2297; 54-2298; 54-2302; 54-2312; 54-2390; 53-2391; 54-2392; 52-2394; 52-2395; 54-2400; 54-2401; 54-2408; 54-2504; 54-2506; 54-2508; 54-2510; 54-2016; 54-2128; 54-2390; 54-2518; 54-2551; 54-2553; 54-4100; 54-5000; 54-6201; 74-7205; 54-7334; 54-7338; 54-7342; 54-7344; 54-7351; 54-7353; 54-7408; 54-9039; 54-9718; 54-9828; 55-0011; 55-0012; 55-1300; 55-0014; 55-0015; 55-0355; 55-1308; 55-1310; 55-1311; 55-1312; 55-1316; 55-1332; 55-1900; 55-1901; 57-0202; 57-0203; 57-0204; 58-6531; 71-1005; 71-1010; 74-7058; 74-7080; 74-7081; 74-7080; 74-7081; 74-7087; 74-7088; 74-7217; 74-7420; 74-7420; 81-1333; 81-1362; 81-1368; 81-1427; 81-1430; 81-1452; 81-1476; 81-1477; 81-1479; 81-8108; 82-0569

### Product Description

Finished product.

### Product Use

Arts and Crafts

### Restrictions on Use

None known.

### Details of the supplier of the safety data sheet

CRAYOLA LLC

1100 Church Lane

Easton, PA 18044

Phone: 1-800-272-9652

Emergency Phone #: Health Emergency - Call local POISON CONTROL

E-mail: support@crayola.com

## Section 2 - HAZARDS IDENTIFICATION

### Classification in accordance with paragraph (d) of 29 CFR 1910.1200.

None needed according to classification criteria.

### GHS Label Elements

#### Symbol(s)

None needed according to classification criteria.

#### Signal Word

None needed according to classification criteria

#### Hazard Statement(s)

None needed according to classification criteria.

#### Precautionary Statement(s)

# Safety Data Sheet

Material Name: CRAYOLA® WASHABLE PAINT

SDS ID: CRAY-034

## Prevention

None needed according to classification criteria.

## Response

None needed according to classification criteria.

## Storage

None needed according to classification criteria.

## Disposal

Dispose in accordance with all applicable federal, state/regional and local laws and regulations.

## Other Hazards

None known.

## Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

CAS	Component Name	Percent
Not available	Product has been certified as nontoxic by the Art & Creative Materials Institute, Inc. and conforms to ASM D 4236 standard practice for labeling art materials for acute and chronic adverse health hazards.	100

## Component Related Regulatory Information

The chemical identity and/or percentage of composition is being withheld as a trade secret.

## Section 4 - FIRST AID MEASURES

### Inhalation

It is unlikely that emergency treatment will be required. Remove from exposure. Get medical attention, if needed.

### Skin

It is unlikely that emergency treatment will be required. If adverse effects occur, wash with soap or mild detergent and large amounts of water. Get medical attention, if needed.

### Eyes

It is unlikely that emergency treatment will be required. Flush eyes with plenty of water for at least 15 minutes. If eye irritation persists, get medical advice/attention.

### Ingestion

Call a poison control center or doctor immediately for treatment advice.

## Most Important Symptoms/Effects

### Acute

No information on significant adverse effects.

### Delayed

No information on significant adverse effects.

## Indication of any immediate medical attention and special treatment needed

Treat symptomatically and supportively.

## Section 5 - FIRE FIGHTING MEASURES

### Extinguishing Media

#### Suitable Extinguishing Media

carbon dioxide, regular dry chemical, regular foam, Water

# Safety Data Sheet

**Material Name: CRAYOLA® WASHABLE PAINT**

**SDS ID: CRAY-034**

## **Unsuitable Extinguishing Media**

None known.

## **Hazardous Combustion Products**

Oxides of carbon

## **Advice for firefighters**

Slight fire hazard.

## **Fire Fighting Measures**

Move container from fire area if it can be done without risk. Avoid inhalation of material or combustion by-products. Stay upwind and keep out of low areas.

## **Special Protective Equipment and Precautions for Firefighters**

Wear protective clothing and equipment suitable for the surrounding fire.

## **Section 6 - ACCIDENTAL RELEASE MEASURES**

### **Personal Precautions, Protective Equipment and Emergency Procedures**

Wear personal protective clothing and equipment, see Section 8.

### **Methods and Materials for Containment and Cleaning Up**

Collect spilled material in appropriate container for disposal.

## **Section 7 - HANDLING AND STORAGE**

### **Precautions for Safe Handling**

Wash thoroughly after handling.

### **Conditions for Safe Storage, Including any Incompatibilities**

None needed according to classification criteria.

Store and handle in accordance with all current regulations and standards. See original container for storage recommendations. Keep separated from incompatible substances.

### **Incompatible Materials**

oxidizing materials

## **Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION**

### **Component Exposure Limits**

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit. At this time, the other constituents have no known exposure limits.

### **ACGIH - Threshold Limit Values - Biological Exposure Indices (BEI)**

There are no biological limit values for any of this product's components.

### **Engineering Controls**

Based on available information, additional ventilation is not required.

### **Individual Protection Measures, such as Personal Protective Equipment**

#### **Eye/face protection**

Eye protection not required under normal conditions.

#### **Skin Protection**

Protective clothing is not required under normal conditions.

#### **Respiratory Protection**

No respirator is required under normal conditions of use. Under conditions of frequent use or heavy exposure, respiratory protection may be needed.

#### **Glove Recommendations**

Protective gloves are not required under normal conditions.

# Safety Data Sheet

Material Name: CRAYOLA® WASHABLE PAINT

SDS ID: CRAY-034

## Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance</b>	multiple colored liquid	<b>Physical State</b>	liquid
<b>Odor</b>	faint odor ,floral odor	<b>Color</b>	multiple
<b>Odor Threshold</b>	Not available	<b>pH</b>	7.1 - 9.4
<b>Melting Point</b>	Not available	<b>Boiling Point</b>	Not available
<b>Boiling Point Range</b>	Not available	<b>Freezing point</b>	Not available
<b>Evaporation Rate</b>	Not available	<b>Flammability (solid, gas)</b>	Not available
<b>Autoignition Temperature</b>	Not available	<b>Flash Point</b>	Not available
<b>Lower Explosive Limit</b>	Not available	<b>Decomposition temperature</b>	Not available
<b>Upper Explosive Limit</b>	Not available	<b>Vapor Pressure</b>	Not available
<b>Vapor Density (air=1)</b>	Not available	<b>Specific Gravity (water=1)</b>	Not available
<b>Water Solubility</b>	(Soluble )	<b>Partition coefficient: n-octanol/water</b>	Not available
<b>Viscosity</b>	40 - 80	<b>Kinematic viscosity</b>	Not available
<b>Solubility (Other)</b>	Not available	<b>Density</b>	8.3 - 10.2
<b>Physical Form</b>	Liquid	<b>Molecular Weight</b>	Not available

## Section 10 - STABILITY AND REACTIVITY

### Reactivity

No hazard expected.

### Chemical Stability

Stable at normal temperatures and pressure.

### Possibility of Hazardous Reactions

Will not polymerize.

### Conditions to Avoid

None reported.

### Incompatible Materials

oxidizing materials

### Hazardous decomposition products

Oxides of carbon



# Safety Data Sheet

**Material Name: CRAYOLA® WASHABLE PAINT**

**SDS ID: CRAY-034**

## **Thermal decomposition products**

Oxides of carbon

## **Section 11 - TOXICOLOGICAL INFORMATION**

### **Information on Likely Routes of Exposure**

#### **Inhalation**

No information on significant adverse effects.

#### **Skin Contact**

No information on significant adverse effects.

#### **Eye Contact**

No information on significant adverse effects.

#### **Ingestion**

No information on significant adverse effects.

### **Acute and Chronic Toxicity**

#### **Component Analysis - LD50/LC50**

The components of this material have been reviewed in various sources and no selected endpoints have been identified.

### **Product Toxicity Data**

#### **Acute Toxicity Estimate**

No data available.

#### **Immediate Effects**

None

#### **Delayed Effects**

None

#### **Irritation/Corrosivity Data**

None

#### **Respiratory Sensitization**

No information available for the product.

#### **Dermal Sensitization**

No information available for the product.

#### **Component Carcinogenicity**

None of this product's components are listed by ACGIH, IARC, NTP, DFG or OSHA.

#### **Germ Cell Mutagenicity**

No information available for the product.

#### **Tumorigenic Data**

No data available

#### **Reproductive Toxicity**

No information available for the product.

#### **Specific Target Organ Toxicity - Single Exposure**

No target organs identified.

#### **Specific Target Organ Toxicity - Repeated Exposure**

No target organs identified.

#### **Aspiration hazard**

no data available.

# Safety Data Sheet

**Material Name: CRAYOLA® WASHABLE PAINT**

**SDS ID: CRAY-034**

## **Medical Conditions Aggravated by Exposure**

No data available.

## **Section 12 - ECOLOGICAL INFORMATION**

### **Ecotoxicity**

No information available for the product.

### **Component Analysis - Aquatic Toxicity**

No LOLI ecotoxicity data are available for this product's components.

### **Persistence and Degradability**

No information available for the product.

### **Bioaccumulative Potential**

No information available for the product.

### **Mobility**

No information available for the product.

## **Section 13 - DISPOSAL CONSIDERATIONS**

### **Disposal Methods**

Dispose in accordance with all applicable federal, state/regional and local laws and regulations. Recycle if possible.

### **Component Waste Numbers**

The U.S. EPA has not published waste numbers for this product's components.

## **Section 14 - TRANSPORT INFORMATION**

### **US DOT Information:**

UN/NA #: Not regulated

### **IATA Information:**

UN#: Not regulated

### **ICAO Information:**

UN#: Not regulated

### **IMDG Information:**

UN#: Not regulated

### **International Bulk Chemical Code**

This material does not contain any chemicals required by the IBC Code to be identified as dangerous chemicals in bulk.

## **Section 15 - REGULATORY INFORMATION**

### **U.S. Federal Regulations**

None of this product's components are listed under SARA Sections 302/304 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65), CERCLA (40 CFR 302.4), TSCA 12(b), or require an OSHA process safety plan.

### **SARA Section 311/312 (40 CFR 370 Subparts B and C) reporting categories**

No hazard categories applicable.

### **U.S. State Regulations**

None of this product's components are listed on the state lists from CA, MA, MN, NJ or PA.

### **California Safe Drinking Water and Toxic Enforcement Act (Proposition 65)**

Not listed under California Proposition 65.

# Safety Data Sheet

Material Name: CRAYOLA® WASHABLE PAINT

SDS ID: CRAY-034

## Component Analysis - Inventory

### U.S. Inventory (TSCA)

All of the components of this product are listed on the TSCA Inventory.

## Section 16 - OTHER INFORMATION

### NFPA Ratings

Health: 1 Fire: 1 Instability: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

### Summary of Changes

07/06/2020 - Update to Section(s) 1.

### Revision date

Updated: 8/11/2020

### Key / Legend

ACGIH - American Conference of Governmental Industrial Hygienists; ADR - European Road Transport; AU - Australia; BOD - Biochemical Oxygen Demand; C - Celsius; CA - Canada; CA/MA/MN/NJ/PA - California/Massachusetts/Minnesota/New Jersey/Pennsylvania\*; CAS - Chemical Abstracts Service; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CFR - Code of Federal Regulations (US); CLP - Classification, Labelling, and Packaging; CN - China; CPR - Controlled Products Regulations; DFG - Deutsche Forschungsgemeinschaft; DOT - Department of Transportation; DSD - Dangerous Substance Directive; DSL - Domestic Substances List; EC - European Commission; EEC - European Economic Community; EIN - European Inventory of (Existing Commercial Chemical Substances); EINECS - European Inventory of Existing Commercial Chemical Substances; ENCS - Japan Existing and New Chemical Substance Inventory; EPA - Environmental Protection Agency; EU - European Union; F - Fahrenheit; F - Background (for Venezuela Biological Exposure Indices); IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; ICAO - International Civil Aviation Organization; IDL - Ingredient Disclosure List; IDLH - Immediately Dangerous to Life and Health; IMDG - International Maritime Dangerous Goods; ISHL - Japan Industrial Safety and Health Law; IUCLID - International Uniform Chemical Information Database; JP - Japan; Kow - Octanol/water partition coefficient; KR KECI Annex 1 - Korea Existing Chemicals Inventory (KECI) / Korea Existing Chemicals List (KECL); KR KECI Annex 2 - Korea Existing Chemicals Inventory (KECI) / Korea Existing Chemicals List (KECL), KR - Korea; LD50/LC50 - Lethal Dose/ Lethal Concentration; KR REACH CCA - Korea Registration and Evaluation of Chemical Substances Chemical Control Act; LEL - Lower Explosive Limit; LLV - Level Limit Value; LOLI - List Of Lists™ - ChemADVISOR's Regulatory Database; MAK - Maximum Concentration Value in the Workplace; MEL - Maximum Exposure Limits; MX - Mexico; Ne - Non-specific; NFPA - National Fire Protection Agency; NIOSH - National Institute for Occupational Safety and Health; NJTSR - New Jersey Trade Secret Registry; Nq - Non-quantitative; NSL - Non-Domestic Substance List (Canada); NTP - National Toxicology Program; NZ - New Zealand; OSHA - Occupational Safety and Health Administration; PEL - Permissible Exposure Limit; PH - Philippines; RCRA - Resource Conservation and Recovery Act; REACH - Registration, Evaluation, Authorisation, and restriction of Chemicals; RID - European Rail Transport; SARA - Superfund Amendments and Reauthorization Act; Sc - Semi-quantitative; STEL - Short-term Exposure Limit; TCCA - Korea Toxic Chemicals Control Act; TDG - Transportation of Dangerous Goods; TH-TECI - Thailand - FDA Existing Chemicals Inventory (TECI); TLV - Threshold Limit Value; TSCA - Toxic Substances Control Act; TW - Taiwan; TWA - Time Weighted Average; UEL - Upper Explosive Limit; UN/NA - United Nations /North American; US - United States; VLE - Exposure Limit Value (Mexico); VN (Draft) - Vietnam (Draft); WHMIS - Workplace Hazardous Materials Information System (Canada).

### Other Information

#### Disclaimer:

Supplier gives no warranty whatsoever, including the warranties of merchantability or of fitness for a particular purpose. Any product purchased is sold on the assumption the purchaser shall determine the quality and suitability of the product. Supplier expressly disclaims any and all liability for incidental,

# Safety Data Sheet

**Material Name: CRAYOLA® WASHABLE PAINT**

**SDS ID: CRAY-034**

consequential or any other damages arising out of the use or misuse of this product. No information provided shall be deemed to be a recommendation to use any product in conflict with any existing patent rights.

## Safety Data Sheet

**Material Name: CRAYOLA® WATER COLORS (PAN TYPE); ARTISTA II WATER COLORS (PAN TYPE)**

**SDS ID: BNSSS083**

### \*\*\*Section 1 - PRODUCT AND COMPANY IDENTIFICATION\*\*\*

**Material Name: CRAYOLA® WATER COLORS (PAN TYPE); ARTISTA II WATER COLORS (PAN TYPE)**

CRAYOLA LLC  
1100 Church Lane  
Easton, PA 18044  
support@crayola.com

Phone: 1-800-272-9652

Health Emergency - Call local Poison Control Center  
Transportation Emergency: 1-800-535-5053

#### Synonyms

CRAYOLA WATER COLORS (PAN TYPE); ARTISTA II WATER COLORS (PAN TYPE); PRODUCT CODE(S): WASHABLE WATERCOLORS; ARTISTA II; ULTIMATE ART KIT; FOR THE CURE; MASTER WORKS; COLOR CATCHERS; ZOOGLS; 04-1610; 04-1611; 04-1612; 04-1613; 04-1615; 04-1621; 04-1942; 04-1971; 04-2532; 04-2547; 04-2580; 04-2801; 04-2802; 04-2803; 04-5150; 04-5151; 04-5152; 04-5153; 04-5196; 04-5222; 04-5380; 04-5557; 04-5675; 04-5677; 04-5678; 04-5679; 04-5220; 04-5671; 04-5672; 04-5673; 04-5674; 04-8205; 04-8214; 04-8726; 04-5680; 04-5685; 04-5719; 04-5804; 04-8210; 04-8218; 04-8219; 04-8227; 07-4061; 07-4067; 10-5370; 53-0300; 53-0008; 53-0016; 53-0080; 53-0081; 53-007W; 53-0526; 53-1200; 53-2400; 53-2312; 53-0160; 53-0525; 53-0802; 53-120L; 53-1205; 53-1210; 53-1008; 53-1016; 53-1500; 53-1508; 53-1516; 53-0500; 53-0524; 53-0525; 53-0555; 53-1500; 53-8101; 54-0150; 54-1237; 55-4062; 80-6886; 81-1337; 81-6886; 94-3201

#### Product Use

Arts and Crafts

### \*\*\*Section 2 - HAZARDS IDENTIFICATION\*\*\*

#### EMERGENCY OVERVIEW

**Color:** various colors

**Physical Form:** solid

**Odor:** odorless

#### POTENTIAL HEALTH EFFECTS

**Inhalation:** none

**Skin Contact:** none

**Eye Contact:** none

**Ingestion:** none

### \*\*\*Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS\*\*\*

CAS	Component	Percent	Symbol(s)	Risk Phrase(s)
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## Safety Data Sheet

**Material Name: CRAYOLA® WATER COLORS (PAN TYPE); ARTISTA II WATER COLORS (PAN TYPE)**

**SDS ID: BNSSS083**

Not Available	Product has been certified as non-toxic by the art and creative materials institute, inc. and conforms to astm D-4236 standard practice for labeling art materials for acute and chronic adverse health hazards.	100	---	---
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### \*\*\*Section 4 - FIRST AID MEASURES\*\*\*

#### Inhalation

It is unlikely that emergency treatment will be required. Remove from exposure. Get medical attention, if needed.

#### Skin

It is unlikely that emergency treatment will be required. If adverse effects occur, wash with soap or mild detergent and large amounts of water. Get medical attention, if needed.

#### Eyes

It is unlikely that emergency treatment will be required. Wash with large amounts of water or normal saline until no evidence of chemical remains (at least 15-20 minutes). Get medical attention immediately.

#### Ingestion

Contact local poison control center or physician immediately.

### \*\*\*Section 5 - FIRE FIGHTING MEASURES\*\*\*

See Section 9 for Flammability Properties

**NFPA Ratings: Health: 1 Fire: 1 Reactivity: 0**

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

#### Flammable Properties

Slight fire hazard.

#### Extinguishing Media

regular dry chemical, carbon dioxide, water, regular foam

#### Fire Fighting Measures

Move container from fire area if it can be done without risk. Avoid inhalation of material or combustion by-products.

### \*\*\*Section 6 - ACCIDENTAL RELEASE MEASURES\*\*\*

#### Occupational spill/release

Collect spilled material in appropriate container for disposal.

### \*\*\*Section 7 - HANDLING AND STORAGE\*\*\*

#### Handling Procedures

Use methods to minimize dust.

#### Storage Procedures

Store and handle in accordance with all current regulations and standards. See original container for storage recommendations. Keep separated from incompatible substances.

### \*\*\*Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION\*\*\*

#### Component Exposure Limits

ACGIH and EU have not developed exposure limits for any of this product's components.

## Safety Data Sheet

**Material Name: CRAYOLA® WATER COLORS (PAN TYPE); ARTISTA II WATER COLORS (PAN TYPE)**

**SDS ID: BNSSS083**

### Ventilation

Based on available information, additional ventilation is not required.

### PERSONAL PROTECTIVE EQUIPMENT

#### Eyes/Face

Eye protection not required under normal conditions.

#### Protective Clothing

Protective clothing is not required under normal conditions.

#### Glove Recommendations

Protective gloves are not required under normal conditions.

#### Respiratory Protection

No respirator is required under normal conditions of use.

Under conditions of frequent use or heavy exposure, respiratory protection may be needed.

### \*\*\*Section 9 - PHYSICAL AND CHEMICAL PROPERTIES\*\*\*

<b>Physical State:</b>	Solid	<b>Appearance:</b>	Not available
<b>Color:</b>	various colors	<b>Physical Form:</b>	solid
<b>Odor:</b>	odorless	<b>Odor Threshold:</b>	Not available
<b>Melting Point:</b>	Not available	<b>Boiling Point:</b>	Not applicable
<b>Vapor Pressure:</b>	Not applicable	<b>Vapor Density (air = 1):</b>	Not applicable
<b>Density:</b>	Not available	<b>Specific Gravity (water = 1):</b>	Not available
<b>Water Solubility:</b>	Not available	<b>Coeff. Water/Oil Dist:</b>	Not available

### \*\*\*Section 10 - STABILITY AND REACTIVITY\*\*\*

#### Chemical Stability

Stable at normal temperatures and pressure.

#### Conditions to Avoid

None reported.

#### Materials to Avoid

oxidizing materials

#### Decomposition Products

oxides of carbon

#### Possibility of Hazardous Reactions

Will not polymerize.

### \*\*\*Section 11 - TOXICOLOGICAL INFORMATION\*\*\*

#### Component Analysis - LD50/LC50

The components of this material have been reviewed in various sources and no selected endpoints have been identified.

#### RTECS Acute Toxicity (selected)

The components of this material have been reviewed and RTECS publishes no data as of the date on this document.

#### Component Carcinogenicity

None of this product's components are listed by ACGIH, IARC, or DFG.

**Safety Data Sheet****Material Name: CRAYOLA® WATER COLORS (PAN TYPE); ARTISTA II  
WATER COLORS (PAN TYPE)****SDS ID: BNSSS083****RTECS Irritation**

The components of this material have been reviewed and RTECS publishes no data as of the date on this document.

**\*\*\*Section 12 - ECOLOGICAL INFORMATION\*\*\*****Component Analysis - Aquatic Toxicity**

No LOLI ecotoxicity data are available for this product's components.

**\*\*\*Section 13 - DISPOSAL CONSIDERATIONS\*\*\*****Disposal Methods**

Dispose in accordance with all applicable regulations.

**Component Waste Numbers**

The U.S. EPA has not published waste numbers for this product's components.

**\*\*\*Section 14 - TRANSPORT INFORMATION\*\*\*****US DOT Information**

Not regulated as a hazardous material.

**TDG Information**

Not regulated as dangerous goods.

**ADR Information**

Not regulated as dangerous goods.

**RID Information**

Not regulated as dangerous goods.

**IATA Information**

Not regulated as dangerous goods.

**ICAO Information**

Not regulated as dangerous goods.

**IMDG Information**

Not regulated as dangerous goods.

**\*\*\*Section 15 - REGULATORY INFORMATION\*\*\*****Component Analysis**

None of this products components are listed under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 311/312 (40 CFR 370.21), SARA Section 313 (40 CFR 372.65), CERCLA (40 CFR 302.4), TSCA 12(b), or require an OSHA process safety plan.

**SARA Section 311/312 (40 CFR 370 Subparts B and C)**

**Acute Health: No Chronic Health: No Fire: No Pressure: No Reactive: No**

**Component Analysis - State**

None of this product's components are listed on the state lists from CA, MA, MN, NJ or PA.

Not regulated under California Proposition 65

**Canada**

This product has been classified in accordance with the criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.



## Safety Data Sheet

**Material Name:** CRAYOLA® WATER COLORS (PAN TYPE); ARTISTA II  
WATER COLORS (PAN TYPE)

**SDS ID:** BNSSS083

**WHMIS Classification:** Not a Controlled Product under Canada's Workplace Hazardous Material Information System.

### Canadian WHMIS Ingredients Disclosure List

Components of this material have been checked against the Canadian WHMIS Ingredients Disclosure List and no components were found on the list.

### Component Analysis - Inventory

No information is available.

## \* \* \*Section 16 - OTHER INFORMATION\* \* \*

### Key / Legend

ACGIH - American Conference of Governmental Industrial Hygienists; ADR - European Road Transport; AU - Australia; BOD - Biochemical Oxygen Demand; C - Celsius; CA - Canada; CAS - Chemical Abstracts Service; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CN - China; CPR - Controlled Products Regulations; DFG - Deutsche Forschungsgemeinschaft; DOT - Department of Transportation; DSL - Domestic Substances List; EEC - European Economic Community; EINECS - European Inventory of Existing Commercial Chemical Substances; EPA - Environmental Protection Agency; EU - European Union; F - Fahrenheit; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; ICAO - International Civil Aviation Organization; IDL - Ingredient Disclosure List; IDLH - Immediately Dangerous to Life and Health; IMDG - International Maritime Dangerous Goods; JP - Japan; Kow - Octanol/water partition coefficient; KR - Korea; LEL - Lower Explosive Limit; LOLI - List Of Lists™ - ChemADVISOR's Regulatory Database; MAK - Maximum Concentration Value in the Workplace; MEL - Maximum Exposure Limits; NFPA - National Fire Protection Agency; NIOSH - National Institute for Occupational Safety and Health; NJTSR - New Jersey Trade Secret Registry; NTP - National Toxicology Program; NZ - New Zealand; OSHA - Occupational Safety and Health Administration; PH - Philippines; RCRA - Resource Conservation and Recovery Act; RID - European Rail Transport; RTECS - Registry of Toxic Effects of Chemical Substances®; SARA - Superfund Amendments and Reauthorization Act; STEL - Short-term Exposure Limit; TDG - Transportation of Dangerous Goods; TSCA - Toxic Substances Control Act; TWA - Time Weighted Average; UEL - Upper Explosive Limit; US - United States

End of Sheet BNSSS083



**CHARLES LEONARD, INC.**

Office & School Supplies • Arts & Crafts • Stationery Products  
145 Kennedy Dr., Hauppauge, NY 11788 • [www.charlesleonard.com](http://www.charlesleonard.com)



June 29, 2011

CREATIVE ARTS GLITTER

Dear Sirs:

Reference is made to your letter dated June 13, 2011 requesting a MSDS for our Creative Arts Glitter. Please be advised that this item is not considered a hazardous chemical. Therefore, we do not have an MSDS available.

The product has been tested under CPSI and has passed the lead and phthalates testing.

If you have any questions, please contact us at 631-273-6700.

Sincerely,

Steve Bloch  
Vice President of Sales

SB/gp



# Safety Data Sheet

## Creme Cleanser

### Section 1. Identification

Product Identifier	Creme Cleanser		
Synonyms	N/A		
Manufacturer Stock Numbers	N/A		
Recommended use	Bowl Cleaner		
Uses advised against	N/A		
Manufacturer Contact			
Address	Pro Link 500 Chapman Street Canton , MA, 02021 USA		
	Phone	Emergency Phone	Fax
	(800) 745-4657	(866) 303-6948	(781) 828-9551

### Section 2. Hazards Identification

Classification	ACUTE TOXICITY - DERMAL - Category 5 ACUTE TOXICITY - ORAL - Category 5 EYE DAMAGE/IRRITATION - Category 2B SKIN CORROSION/IRRITATION - Category 3
Signal Word	Warning
Pictogram	
Hazard Statements	Causes eye irritation Causes mild skin irritation May be harmful if swallowed May be harmful in contact with skin
Precautionary Statements	
Response	If eye irritation persists: Get medical advice/attention. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If skin irritation occurs: Get medical advice/attention. If swallowed: Immediately call a poison center/doctor.
Prevention	Wash thoroughly after handling.

Storage                      Wear protective gloves/protective clothing/eye protection/face protection.  
 Disposal                     Store in a dry place. Store in a closed container.  
                                    Dispose of contents/container in accordance with  
                                    local/regional/national/international regulations.

Ingredients of unknown toxicity           0%

Hazards not Otherwise Classified           No Data Available

### Section 3. Ingredients

CAS	Ingredient Name	Weight %
1643-20-5	1-Dodecanamine, N,N-dimethyl-, N-oxide	15 %
1310-58-3	Potassium hydroxide	3 %
1317-65-3	Calcium carbonate	30 %
27176-87-0	Benzenesulfonic acid, dodecyl-	4 %

Occupational exposure limits, if available, are listed in Section 8.

### Section 4. First-Aid Measures

Eye                            Immediately flush eyes with plenty of water. Get medical attention, if irritation persists.

Skin                           Immediately wash skin with soap and plenty of water. Remove contaminated clothing. Get medical attention if symptoms occur. Wash clothing before reuse.

Inhalation                   Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Ingestion                    If swallowed, do NOT induce vomiting. Give victim a glass of water or milk. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person.

### Section 5. Fire Fighting Measures

Suitable Extinguishing Media           Use alcohol foam, carbon dioxide, or water spray when fighting fires involving this material.

Unsuitable Extinguishing Media        N/A

Fire fighting instructions                As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

### Section 6. Accidental Release Measures

LARGE SPILLS                Stop leak at source and collect into suitable container, then treat as a small spill.

SMALL SPILLS                Absorb with an inert solid and scoop up for disposal, then rinse soiled area with water.

## Section 7. Handling and Storage

Storage	Keep away from food and drinking water. Keep container closed to prevent drying out. Store in a cool place in original container and protect from sunlight.
Handling	Wash thoroughly after handling. Avoid contact with eyes, skin, and clothing. Follow all SDS/label precautions even after container is emptied because they may retain product residues.

## Section 8. Exposure Controls/Personal Protection

Occupational Exposure Limits	Ingredient Name	ACGIH TLV	OSHA PEL	STEL
	1-Dodecanamine, N,N-dimethyl-, N-oxide	N/A	N/A	N/A
	Potassium hydroxide	0	N/A	N/A
	Calcium carbonate	0	N/A	N/A
	Benzenesulfonic acid, dodecyl-	N/A	N/A	N/A
Personal Protective Equipment	Goggles, Gloves, Apron			
202	Eyes: Safety glasses or goggles.			
	Skin: Nitrile or polyethylene gloves and aprons. Do not use cotton.			
	Ventilation: Positive down-draft exhaust ventilation should be provided to maintain vapor concentration below TLV.			
	Respiratory: Not available			

## Section 9. Physical and Chemical Properties

Physical State	Liquid
Color	White/Opaque/Thick
Odor	Mild
Odor Threshold	N/A
Solubility	Partially
Partition coefficient Water/n-octanol	N/A
VOC%	N/A
Viscosity	N/A
Specific Gravity	1.07
Density lbs/Gal	N/A
Pounds per Cubic Foot	N/A
Flash Point	N/A
FP Method	N/A
Ph	9.5-10.5
Melting Point	N/A
Boiling Point	212 Deg. F
Boiling Range	N/A
LEL	N/A
UEL	N/A
Evaporation Rate	N/A
Flammability	N/A
Decomposition Temperature	N/A
Auto-ignition Temperature	N/A
Vapor Pressure	N/A
Vapor Density	N/A

## Section 10. Stability and Reactivity

### Stability

Chemical Stability: Stable  
Conditions to Avoid: Temperature Extremes  
Incompatibility: Chlorine Bleach, Oxidizers, Acids  
Hazardous Decomposition: Will not occur  
Hazardous Polymerization: Will not occur

## Section 11. Toxicological Information

Toxicological Information      Primary Route(s) of Entry: Skin contact /absorption and inhalation  
Signs and Symptoms of Overexposure: Gastrointestinal irritation (nausea, vomiting, diarrhea), irritation to nose, throat, and respiratory tract.  
Target Organ Effects: Overexposure to this material (or its components) has been suggested as a cause of the following effects in laboratory animals and may aggravate pre-existing disorders or these organs in humans: chronic ingestion may cause kidney and liver lesions at high doses.  
**IMMEDIATE HEALTH EFFECTS**  
**EYES:** Exposure may cause noticeable pain, and severe irritation and transient corneal injury.  
**SKIN:** Causes chemical burns. Harmful contact may not cause immediate pain.  
**INHALATION:** Exposure to vapor or mist is possible. Short term inhalation is no likely to cause harmful effects:  
breathing large amounts may be harmful. Symptoms are more typically seen at air concentrations  
exceeding the recommended exposure limits.  
**INGESTION:** Harmful or fatal if swallowed. Causes chemical burns to the mouth, throat and stomach.  
**REPRODUCTIVE / DEVELOPMENTAL INFORMATION**  
No Data  
**CARCINOGENIC INFORMATION:** This material is not listed as a carcinogen by IARC, NTP, or OSHA  
**LONG TERM EFFECTS:** No Data

## Section 12. Ecological Information

No Data Available

## Section 13. Disposal

WASTE DISPOSAL METHOD:      For proper disposal of waste, refer to federal and state regulations.

## Section 14. Transport Information

UN Number                      N/A  
UN Proper Shipping Name      N/A  
DOT Classification              Non Hazardous  
Packing Group                  N/A

## Section 15. Regulatory Information

Regulatory Statement      US Federal Regulations  
TSCA (Toxic Substances Control Act) Status  
TSCA (United States) The intentional ingredients of this product are listed.  
CERCLA RQ - 40 CFR 355 Appendix A: None  
SARA 302 Components 40 CFR Appendix A: None  
Section 311/312 Hazard Class 40 CFR 370.2  
Immediate (X) Delayed (X) Fire ( ) Reactivity ( ) Sudden Release of Pressure ( )  
SARA 313 Components - 40 CFR 372.65  
\* Listed in Section 2 as Diethylene Glycol Monomethyl Ether  
State and Local Regulations  
California Proposition 65: None  
California SCAQMD Rule 443.1 VOC's: > 100g/L  
North Carolina Administrative Code 2D.1104 and 2B.0610 None  
South Carolina Regulation 62.5 Standard Number 8: None

## Section 16. Other Information

Revision Date                                  4/3/2015

DISCLAIMER:                                  The information contained herein is believed to be accurate and is offered in good faith. This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Mixing this product with any other materials may change the characteristics such as flash point, flammability or health effects. Because product use is beyond our control, no warranty is given, expressed or implied.



# Safety Data Sheet

## SECTION 1 -- IDENTIFICATION

**Product Name:** Critical Care  
**Issue Date:** 1/9/2015  
**Date Revised:** NA  
**Distributed By:** EnviroX  
1938 E. Fairchild St.  
Danville, IL. 61832  
800-281-9604



**Recommended Uses:** Ready To Use Hard Surface Disinfectant.

**In Case of Emergency:** Have the product container or label with you when calling a poison control center or doctor. You may contact CHEMTREC 1-800-424-9300 for emergency medical treatment information.

## SECTION 2 -- HAZARDS IDENTIFICATION

**GHS Classification – Not Classified**

**Unclassified Hazards:** May cause slight eye irritation

**Precautionary Statements:** Avoid direct skin and eye contact. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.

HMIS Rating

Health	0
Flammability	0
Reactivity	0

## SECTION 3 -- COMPOSITION / INFORMATION ON INGREDIENTS

**Components:** The specific chemical identities and exact percentages (concentrations) of composition have been withheld as a trade secret.

None of the ingredients is considered hazardous according to the criteria of 29CFR1910.1200 and DOT Reg 49 CFR 172. Ingredients are listed for informational purposes to assist emergency medical response personnel.

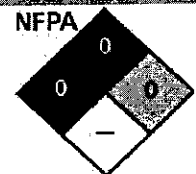
	Wt%
Water (CAS No. 7732-18-5)	> 95
Citric Acid (CAS No. 77-92-9)	< 5.0
Silver Ions	0.0030

## SECTION 4 -- FIRST-AID MEASURES

**Eye Contact:** Hold eyelids open and flush thoroughly with a steady, gentle stream of water for at least 15 minutes. If irritation persists consult a physician.  
**Skin Contact:** Rinse with water. If irritation persists consult a physician.  
**Inhalation:** If breathing is affected, remove victim to fresh air and consult a physician.  
**Ingestion:** If irritation or discomfort occurs, call a physician. DO NOT INDUCE VOMITING.

## SECTION 5 -- FIRE-FIGHTING MEASURES

**Flammability:** Not flammable or combustible.  
**Flammable Limits:** Not applicable.  
**Extinguishing Media:** Not applicable.  
**Fire and Explosion Hazards:** None.



## SECTION 6 -- ACCIDENTAL RELEASE MEASURES

**Response to Spills:** SMALL SPILLS: Contain spill, flush to sanitary sewer, and rinse area with water. LARGE SPILLS: Dike or dam spill, pump to containers or soak up with inert absorbent, and prevent runoff to creeks and waterways. Personal Protective Equipment is not normally required. Avoid contact with eyes.

## SECTION 7 -- HANDLING AND STORAGE

**Handling Precautions:** Close container tightly when not in use.  
**Storage Precautions:** Store in a cool, dry place. Do not contaminate food, feed, or drinking water. Keep from freezing. Keep out of direct sunlight.

## SECTION 8 -- EXPOSURE CONTROLS / PERSONAL PROTECTION

No special protection or precautions have been identified for using this product under directed consumer use conditions. The following recommendations are given for production facilities and for other conditions and situations where there is increased potential for accidental, large-scale or prolonged exposure.

**Hygienic Practices:** Avoid direct eye and skin contact. If irritation occurs, flush thoroughly with water. When product is applied to a floor surface, signage should be used to indicate slippery areas until they are dry.  
**Engineering Controls:** Use general ventilation to minimize exposure to mist. Eyewash station is suggested.  
**Personal Protective Equipment:** Not normally required. If contact is likely for prolonged or repeated contact, eye and hand protection is recommended.

**SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES**

Appearance.....	Colorless liquid	Boiling Point.....	Not established
Odor.....	Practically Odorless	Freezing Point.....	Not established
pH.....	2	Evaporation Rate (Butyl Acetate=1).....	Not established
Specific Gravity (H <sub>2</sub> O=1).....	Similar to water	Vapor Density (Air=1).....	Not established
Solubility.....	Water soluble	Vapor Pressure (mmHg).....	Not established
VOC Content (% Wt.).....	0.00% (0.000 lbs/gallon)		

**SECTION 10 – STABILITY AND REACTIVITY**

<b>Chemical Stability:</b>	Stable.
<b>Incompatibility:</b>	Not applicable.
<b>Hazardous Decomposition:</b>	None.
<b>Polymerization:</b>	None.
<b>Conditions to Avoid:</b>	Not applicable.

**SECTION 11 – TOXICOLOGICAL INFORMATION**

THIS PRODUCT DOES NOT CONTAIN ANY KNOWN OR ANTICIPATED CARCINOGENS ACCORDING TO THE CRITERIA OF THE NTP ANNUAL REPORT ON CARCINOGENS, OSHA 29 CFR 1910.1000, SUBPART Z, OR THE IARC MONOGRAPHS.

Acute Oral, Rat.....	LD50>5000 mg/Kg	Epidemiology.....	None Known
Acute Dermal, Rat.....	LD50>5000 mg/Kg	Teratogenicity.....	None Known
Primary Eye Irritation.....	Rabbit – Category IV	Neurotoxicity.....	None Known
Primary Eye Irritation.....	Rabbit – Slightly Irritating	Dermal Sensitization.....	Guinea Pigs – Not a contact sensitizer
Subchronic/Chronic Toxicity: Does not contain any recognized carcinogens, mutagens or reproductive toxicants.			

**SECTION 12 – ECOLOGICAL INFORMATION**

<b>Ecotoxicity:</b>	None.
<b>Environmental Fate:</b>	Readily degraded. Ionic silver is degraded into inert elemental silver or insoluble silver complexes in the environment.

**SECTION 13 – DISPOSAL CONSIDERATIONS**

<b>Waste Disposal Method:</b>	Dispose of in accordance with local, state, and federal regulations.
<b>RCRA Classification:</b>	Non-hazardous.

**SECTION 14 – TRANSPORT INFORMATION**

<b>DOT Classification:</b>	Non-hazardous.
<b>Exceptions:</b>	None.
<b>Description:</b>	Not applicable.

**SECTION 15 – REGULATORY INFORMATION**

<b>TSCA:</b>	TSCA Inventory: All components are listed. TSCA Health and Safety Reporting List: None of the components are listed. TSCA Chemical Test Rules: None of the components are listed. TSCA Section 12b: None of the components are listed. TSCA Significant New Use Rule: None of the components has a SNUR.
<b>CERCLA:</b>	No RQ was assigned to silver compounds. See 50FR13456 (April 4, 1985).
<b>ARA 302/304:</b>	None of the components has a RQ or a TPQ.
<b>SARA 311/312:</b>	None of the components are reportable.
<b>Clean Air:</b>	None of the components are a Hazardous Air Pollutant, Class 1 Ozone Depletor, or Class 2 Ozone Depletor.
<b>Clean Water Act:</b>	None of the components are a Hazardous Substance, Priority Pollutant, or Toxic Pollutant.
<b>OSHA:</b>	None of the components are considered hazardous.
<b>California Proposition 65:</b>	None of the components are listed.

**SECTION 16 – OTHER INFORMATION**

<b>ID:</b>	M5040
<b>Issue Date (Rev):</b>	January 9, 2015

Revision Summary: NA

**SAFETY DATA SHEET  
CRYSTAL CLEAR OPS**

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**1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**

Pacon Corporation  
2525 N. Casaloma Drive  
Appleton WI 54913  
Telephone: 1-800-333-2545  
Emergency Telephone: 1-800-222-1222

PRODUCT NAME: CRYSTAL CLEAR OPS  
CHEMICAL NAME: ORIENTED POLYSTYRENE  
CAS REGISTRY NO: N/A  
DEPARTMENT OF TRANSPORTATION HAZARD CLASS: NOT REGULATED  
SHIPPING NAME: N/A

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**2. HAZARDS IDENTIFICATION**

Potential Health Effects

- Eye:** Solid or dusts may cause irritation or corneal injury due to mechanical action.
- Skin:** Essentially non-irritating to skin. Skin absorption is unlikely due to physical properties.
- Ingestion:** No hazards anticipated from ingestion incidental to industrial exposure.
- Inhalation:** Vapors are unlikely due to physical properties. Dust may cause irritation to upper respiratory tract.
- Systemic (Other Target Organ) Effects:** No specific data available, however, repeated exposures are not anticipated to cause any significant adverse effects.

No Classification and labeling required (GHS-US)

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**3. COMPOSITION / INFORMATION ON INGREDIENTS**

COMPOSITION	APPROX. WT. %	CAS REG. NO.
POLYSTYRENE	100%	009003-53-6

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**4. FIRST AID**

- Eye:** Flush eyes with plenty of water; mechanical effects only.
- Skin:** No adverse effects anticipated by this route of exposure incidental to proper industrial handling.
- Ingestion:** No adverse effects anticipated by this route of exposure incidental to proper industrial handling.
- Inhalation:** No adverse effects anticipated by this route of exposure incidental to proper industrial handling.

---

## 5. FIRE FIGHTING MEASURES

### Flammable Properties

FLASH POINT: Not applicable  
METHOD USED: Not applicable  
AUTOIGNITION TEMPERATURES: Not applicable

### Flammability Limits

LFL: Not applicable  
UFL: Not applicable

Hazardous Combustion Products: Under fire conditions polymers decompose. This smoke may contain polymer fragments of varying compositions in addition to unidentified toxic and/or irritating compounds.

Other Flammability Information: Dense smoke is emitted when burned without sufficient oxygen.

Extinguishing Media: Water, carbon dioxide, dry chemical.

Fire Fighting Instructions: Keep people away. Isolate fire area and deny unnecessary entry. Cool surroundings with water to localize fire zone. Soak thoroughly with water to cool and prevent reignition.

Protective Equipment for Fire Fighters: Wear positive-pressure self-contained breathing apparatus (SCBA) and protective fire fighting clothing (includes fire fighting helmet, coat, pants, boots, and gloves). If protective equipment is not available or not used, fight fire from a protected location or safe distance.

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## 6. ACCIDENTAL RELEASE MEASURES

Cleanup: Sweep up.

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## 7. HANDLING AND STORAGE

Handling: Mechanical handling equipment can cause formation of dusts. Maintain good housekeeping. Layers of flammable dusts should not be permitted to form.

Storage: Recommend storing in a cool, dry place away from high temperatures, hot pipes, and direct sun.

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## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls: Good general ventilation sufficient for most conditions.

### Personal Protective Equipment

Eye/Face Protection: Use safety glasses.

Skin Protection: No precautions other than clean body-covering clothing should be needed.

Respiratory Protection: No respiratory protection should be needed.

Exposure Guideline(s): None established.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE/PHYSICAL STATE: Plastic film; clear.  
ODOR: Odorless.  
VAPOR PRESSURE: Not applicable  
VAPOR DENSITY: Not applicable  
BOILING POINT: Not applicable  
SOLUBILITY IN WATER/MISCIBILITY: Not applicable  
SPECIFIC GRAVITY OR DENSITY: 1.05

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## 10. STABILITY AND REACTIVITY

Chemical Stability: Thermally stable at typical use temperatures.  
Conditions to Avoid: Avoid temperatures above 300C. Product can decompose at elevated temperatures. Avoid direct sunlight.  
Incompatibility with Other Materials: None known.  
Hazardous Decomposition Products: Processing may release fumes which may include polymer fragments and other decomposition products. Fumes can be irritating. At temperatures exceeding melt temperatures, polymer fragments can occur. Hazardous decomposition products depend upon temperature, air supply and the presence of other materials. Hazardous decomposition products may include and are not limited to: hydrocarbons, carbon monoxide, noxious fumes.  
Hazardous Polymerization: Will not occur.

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## 11. TOXICOLOGICAL INFORMATION

Skin: Dermal LD50 has not been determined.  
Ingestion: Oral LD50 has not been determined.

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## 12. ECOLOGICAL INFORMATION

Ecotoxicity: Not expected to be acutely toxic.

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## 13. DISPOSAL CONSIDERATION

Disposal: DO NOT DUMP INTO ANY SEWERS, ON THE GROUND OR INTO ANY BODY OF WATER. All disposal methods must be in compliance with all Federal, State/provincial and local laws and regulations. Regulations may vary in different locations. Waste characterizations and compliance with applicable laws are the responsibility solely of the waste generator.

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**14. TRANSPORTATION INFORMATION**

US DOT HAZARD CLASSIFICATION: Not Regulated.

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**15. REGULATORY INFORMATION**

OSHA hazardous chemical(s) according to 29 CFR 1910.1200: None.

WHMIS (Canada) Status: Not a controlled product.

WHMIS (Canada) Ingredients Disclosure List: None.

Chemical(s) subject to the reporting requirements of Section 313 or Title III of SARA of 1986 and 40CFR 372: None.

SARA Sections 311 and 312 hazard classification(s): N/A.

US Toxic Substances Control Act (TSCA): All Components of this product are listed or are excluded from listing on the TSCA Chemical Substance Inventory.

Material(s) known to the State of California to cause cancer: None

Material(s) known to the State of California to cause adverse reproductive effects: None

Massachusetts Substance List: None

New Jersey Workplace Hazardous Substance List: None

Pennsylvania Hazardous Substance List: None

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**16. OTHER INFORMATION**

The above information and recommendations are believed accurate and reliable. Pacon Corporation makes no warranty of any kind, either express or implied, including merchantability and fitness. Users should consider these data only as a supplement to other information available from all sources, and should incorporate these into programs for the proper use and disposal of these materials and the safety and health of employees and customers.

## SAFETY DATA SHEET

Creation Date 13-Apr-2010

Revision Date 25-May-2017

Revision Number 3

### 1. Identification

**Product Name** Crystal Violet

**Cat No. :** AC212120000; AC212120250; AC212121000; AC212125000

**Synonyms** C.I. 42555; Gentian Violet; Basic Violet 3

**Recommended Use** Laboratory chemicals.

**Uses advised against** Not for food, drug, pesticide or biocidal product use

#### Details of the supplier of the safety data sheet

##### **Company**

Fisher Scientific  
One Reagent Lane  
Fair Lawn, NJ 07410  
Tel: (201) 796-7100

Acros Organics  
One Reagent Lane  
Fair Lawn, NJ 07410

##### **Emergency Telephone Number**

For information **US** call: 001-800-ACROS-01 / **Europe** call: +32 14 57 52 11  
Emergency Number **US**:001-201-796-7100 / **Europe**: +32 14 57 52 99  
**CHEMTREC** Tel. No.**US**:001-800-424-9300 / **Europe**:001-703-527-3887

### 2. Hazard(s) Identification

#### Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute oral toxicity	Category 4
Serious Eye Damage/Eye Irritation	Category 1
Carcinogenicity	Category 2

#### Label Elements

##### **Signal Word**

Danger

##### **Hazard Statements**

Harmful if swallowed  
Causes serious eye damage  
Suspected of causing cancer



**Precautionary Statements**

**Prevention**

Obtain special instructions before use  
 Do not handle until all safety precautions have been read and understood  
 Use personal protective equipment as required  
 Wash face, hands and any exposed skin thoroughly after handling  
 Do not eat, drink or smoke when using this product

**Response**

IF exposed or concerned: Get medical attention/advice

**Eyes**

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
 Immediately call a POISON CENTER or doctor/physician

**Ingestion**

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell  
 Rinse mouth

**Storage**

Store locked up

**Disposal**

Dispose of contents/container to an approved waste disposal plant

**Hazards not otherwise classified (HNOC)**

Very toxic to aquatic life with long lasting effects  
 WARNING! This product contains a chemical known in the State of California to cause cancer.

**3. Composition / Information on Ingredients**

Component	CAS-No	Weight %
C.I. Basic violet 1	548-62-9	100
Michler's ketone	90-94-8	<0.2

**4. First-aid measures**

<b>Eye Contact</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Immediate medical attention is required.
<b>Skin Contact</b>	Wash off immediately with plenty of water for at least 15 minutes. Get medical attention if symptoms occur.
<b>Inhalation</b>	Move to fresh air. If breathing is difficult, give oxygen. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Immediate medical attention is required.
<b>Ingestion</b>	Do not induce vomiting. Call a physician or Poison Control Center immediately.
<b>Most important symptoms/effects</b>	Causes eye burns.
<b>Notes to Physician</b>	Treat symptomatically

**5. Fire-fighting measures**

<b>Suitable Extinguishing Media</b>	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
<b>Unsuitable Extinguishing Media</b>	No information available
<b>Flash Point</b>	No information available
<b>Method -</b>	No information available
<b>Autoignition Temperature</b>	
<b>Explosion Limits</b>	



<b>Upper</b>	No data available
<b>Lower</b>	No data available
<b>Sensitivity to Mechanical Impact</b>	No information available
<b>Sensitivity to Static Discharge</b>	No information available

**Specific Hazards Arising from the Chemical**

Thermal decomposition can lead to release of irritating gases and vapors. Do not allow run-off from fire fighting to enter drains or water courses.

**Hazardous Combustion Products**

Carbon monoxide (CO) Carbon dioxide (CO<sub>2</sub>) Hydrogen chloride gas Nitrogen oxides (NO<sub>x</sub>)

**Protective Equipment and Precautions for Firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

**NFPA**

<b>Health</b> 2	<b>Flammability</b> 1	<b>Instability</b> 1	<b>Physical hazards</b> N/A
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**6. Accidental release measures**

<b>Personal Precautions</b>	Use personal protective equipment. Ensure adequate ventilation. Avoid dust formation. Avoid contact with skin, eyes and clothing.
<b>Environmental Precautions</b>	Do not flush into surface water or sanitary sewer system. Do not allow material to contaminate ground water system. Prevent product from entering drains. Local authorities should be advised if significant spillages cannot be contained.
<b>Methods for Containment and Clean Up</b>	Sweep up or vacuum up spillage and collect in suitable container for disposal. Avoid dust formation.

**7. Handling and storage**

<b>Handling</b>	Wear personal protective equipment. Ensure adequate ventilation. Avoid dust formation. Do not get in eyes, on skin, or on clothing. Do not breathe dust. Do not ingest.
<b>Storage</b>	Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from direct sunlight.

**8. Exposure controls (personal protection)**

<b>Exposure Guidelines</b>	This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.
<b>Engineering Measures</b>	Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are close to the workstation location.
<b>Personal Protective Equipment</b>	
<b>Eye/face Protection</b>	Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.
<b>Skin and body protection</b>	Wear appropriate protective gloves and clothing to prevent skin exposure.
<b>Respiratory Protection</b>	Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.
<b>Hygiene Measures</b>	Handle in accordance with good industrial hygiene and safety practice.

**9. Physical and chemical properties**

Physical State	Solid
Appearance	Dark green
Odor	Odorless
Odor Threshold	No information available
pH	2.5-3.5 10 g/L aq.sol.(20°C)
Melting Point/Range	215 °C / 419 °F
Boiling Point/Range	No information available
Flash Point	No information available
Evaporation Rate	Not applicable
Flammability (solid,gas)	No information available
Flammability or explosive limits	
Upper	No data available
Lower	No data available
Vapor Pressure	No information available
Vapor Density	Not applicable
Specific Gravity	No information available
Solubility	Insoluble in water
Partition coefficient; n-octanol/water	No data available
Autoignition Temperature	
Decomposition Temperature	No information available
Viscosity	Not applicable
Molecular Formula	C <sub>25</sub> H <sub>30</sub> Cl N <sub>3</sub>
Molecular Weight	407.99

**10. Stability and reactivity**

Reactive Hazard	None known, based on information available
Stability	Stable under normal conditions. Light sensitive.
Conditions to Avoid	Avoid dust formation. Incompatible products. Excess heat. Exposure to light.
Incompatible Materials	Strong oxidizing agents, Strong acids, Strong reducing agents
Hazardous Decomposition Products	Carbon monoxide (CO), Carbon dioxide (CO <sub>2</sub> ), Hydrogen chloride gas, Nitrogen oxides (NO <sub>x</sub> )
Hazardous Polymerization	Hazardous polymerization does not occur.
Hazardous Reactions	None under normal processing.

**11. Toxicological Information**

Acute Toxicity

Product Information  
Component Information

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
C.I. Basic violet 1	LD50 = 420 mg/kg ( Rat )	Not listed	Not listed

Toxicologically Synergistic Products      No information available

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Irritation	Severe eye irritant
Sensitization	No information available

**Carcinogenicity** The table below indicates whether each agency has listed any ingredient as a carcinogen.

Component	CAS-No	IARC	NTP	ACGIH	OSHA	Mexico
C.I. Basic violet 1	548-62-9	Not listed	Not listed	Not listed	Not listed	Not listed
Michler's ketone	90-94-8	Group 2B	Reasonably Anticipated	Not listed	X	Not listed

*IARC: (International Agency for Research on Cancer)  
 Group 1 - Carcinogenic to Humans  
 Group 2A - Probably Carcinogenic to Humans  
 Group 2B - Possibly Carcinogenic to Humans  
 NTP: (National Toxicity Program)  
 Known - Known Carcinogen  
 Reasonably Anticipated - Reasonably Anticipated to be a Human Carcinogen*

**Mutagenic Effects** No information available

**Reproductive Effects** Experiments have shown reproductive toxicity effects on laboratory animals.

**Developmental Effects** Developmental effects have occurred in experimental animals.

**Teratogenicity** Teratogenic effects have occurred in experimental animals.

**STOT - single exposure** None known  
**STOT - repeated exposure** None known

**Aspiration hazard** No information available

**Symptoms / effects, both acute and delayed** No information available

**Endocrine Disruptor Information** No information available

**Other Adverse Effects** Tumorigenic effects have been reported in experimental animals. See actual entry in RTECS for complete information.

**12. Ecological Information**

**Ecotoxicity**

Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. The product contains following substances which are hazardous for the environment.

Component	Freshwater Algae	Freshwater Fish	Microtox	Water Flea
C.I. Basic violet 1	EC50 = 0.025 - 0.8 mg/l, 72 h (Pseudokirchneriella subcapitata) OECD 201	Not listed	Not listed	EC50 = 0.24 - 5 mg/l, 48 h (Daphnia magna (Water flea)) OECD 202

**Persistence and Degradability** Soluble in water Persistence is unlikely based on information available.

**Bioaccumulation/ Accumulation** No information available.

**Mobility** . Will likely be mobile in the environment due to its water solubility.

Component	log Pow
C.I. Basic violet 1	0.51

**13. Hazardous Waste Information**

**Waste Disposal Methods** Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

**14. Transport Information**

**DOT**

UN-No UN3077  
 Proper Shipping Name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.  
 Hazard Class 9  
 Packing Group III

**TDG**

UN-No UN3077  
 Proper Shipping Name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.  
 Hazard Class 9  
 Packing Group III

**IATA**

UN-No UN3077  
 Proper Shipping Name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.\*  
 Hazard Class 9  
 Packing Group III

**IMDG/IMO**

UN-No UN3077  
 Proper Shipping Name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.  
 Hazard Class 9  
 Packing Group III

**15. Regulatory Information**

**International Inventories**

Component	TSCA	DSL	NDSL	EINECS	ELINCS	NLP	PICCS	ENCS	AICS	IECSC	KECL
C.I. Basic violet 1	X	X	-	208-953-6	-		X	X	X	X	X
Michler's ketone	X	X	-	202-027-5	-		X	X	X	X	X

**Legend:**

X - Listed

E - Indicates a substance that is the subject of a Section 5(e) Consent order under TSCA.

F - Indicates a substance that is the subject of a Section 5(f) Rule under TSCA.

N - Indicates a polymeric substance containing no free-radical initiator in its inventory name but is considered to cover the designated polymer made with any free-radical initiator regardless of the amount used.

P - Indicates a commenced PMN substance

R - Indicates a substance that is the subject of a Section 6 risk management rule under TSCA.

S - Indicates a substance that is identified in a proposed or final Significant New Use Rule

T - Indicates a substance that is the subject of a Section 4 test rule under TSCA.

XU - Indicates a substance exempt from reporting under the Inventory Update Rule, i.e. Partial Updating of the TSCA Inventory Data Base Production and Site Reports (40 CFR 710(B)).

Y1 - Indicates an exempt polymer that has a number-average molecular weight of 1,000 or greater.

Y2 - Indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants that comprises one of the eligibility criteria for the exemption rule.

**U.S. Federal Regulations**

TSCA 12(b) Not applicable

**SARA 313**

Component	CAS-No	Weight %	SARA 313 - Threshold Values %
Michler's ketone	90-94-8	<0.2	0.1

**SARA 311/312 Hazard Categories**

Acute Health Hazard Yes  
 Chronic Health Hazard Yes  
 Fire Hazard No  
 Sudden Release of Pressure Hazard No  
 Reactive Hazard No

CWA (Clean Water Act) Not applicable

**Clean Air Act** Not applicable

**OSHA Occupational Safety and Health Administration**  
Not applicable

**CERCLA**  
Not applicable

**California Proposition 65** This product contains the following proposition 65 chemicals

Component	CAS-No	California Prop. 65	Prop 65 NSRL	Category
Michler's ketone	90-94-8	Carcinogen	0.8 µg/day	Carcinogen

**U.S. State Right-to-Know Regulations**

Component	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Michler's ketone	X	X	X	X	-

**U.S. Department of Transportation**

Reportable Quantity (RQ): N  
DOT Marine Pollutant N  
DOT Severe Marine Pollutant N

**U.S. Department of Homeland Security**

This product does not contain any DHS chemicals.

**Other International Regulations**

**Mexico - Grade** No information available

**Prepared By** Regulatory Affairs  
Thermo Fisher Scientific  
Email: EMSDS.RA@thermofisher.com

**Creation Date** 13-Apr-2010  
**Revision Date** 25-May-2017  
**Print Date** 25-May-2017  
**Revision Summary** This document has been updated to comply with the US OSHA HazCom 2012 Standard replacing the current legislation under 29 CFR 1910.1200 to align with the Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

**End of SDS**

## Section 1 Chemical Product and Company Information

Page E1 of E2



5100 West Henrietta Rd  
PO Box 92912  
Rochester, NY 14692-9012  
Tel: (800) 962-2660

**CHEMTREC 24 Hour Emergency**  
**Phone Number (800) 424-9300**  
For laboratory use only.  
Not for drug, food or household use.

**Product** CRYSTAL VIOLET  
**Synonyms** Gentian Violet / Basic Violet 3 / C.I. No. 42555

## Section 2 Hazards Identification

**Signal word:** DANGER**Pictograms:** GHS05 / GHS07 / GHS08 / GHS09**Target organs:** Eyes**GHS Classification:**

Acute toxicity, oral (Category 4)  
Eye damage (Category 1)  
Carcinogenicity (Category 2)  
Aquatic acute (Category 1)  
Aquatic chronic (Category 1)

**GHS Label information: Hazard statement:**

H302: Harmful if swallowed.  
H318: Causes serious eye damage.  
H351: Suspected of causing cancer.  
H410: Very toxic to aquatic life with long lasting effects.

**Precautionary statement:**

P201: Obtain special instructions before use.  
P202: Do not handle until all safety precautions have been read and understood.  
P264: Wash hands thoroughly after handling.  
P270: Do not eat, drink or smoke when using this product.  
P273: Avoid release to the environment.  
P280: Wear protective gloves/protective clothing/eye protection/face protection.  
P301+P330+P312: IF SWALLOWED: Rinse mouth. Call a POISON CENTER or doctor if you feel unwell.  
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P310: Immediately call a POISON CENTER or doctor.  
P391: Collect spillage.  
P405: Store locked up.  
P501: Dispose of contents/container to a licensed chemical disposal agency in accordance with local/regional/national regulations.

Ca Prop 65 - This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm.

## Section 3 Composition / Information on Ingredients

Chemical Name	CAS #	%	EINECS
Crystal violet, biological stain and/or pH indicator	548-62-9	>96%	208-953-6

## Section 4 First Aid Measures

**INGESTION:** HARMFUL IF SWALLOWED. Call physician or Poison Control Center immediately. Induce vomiting only if advised by appropriate medical personnel. Never give anything by mouth to an unconscious person.

**INHALATION:** MAY CAUSE RESPIRATORY TRACT IRRITATION. Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

**EYE CONTACT:** MAY CAUSE EYE IRRITATION AND POSSIBLE DAMAGE. Check for and remove contact lenses. Flush thoroughly with water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get immediate medical attention.

**SKIN ABSORPTION:** MAY CAUSE SKIN IRRITATION. Remove contaminated clothing. Flush thoroughly with mild soap and water. If irritation occurs, get medical attention.

## Section 5 Fire Fighting Measures

**Suitable Extinguishing Media:** Use any media suitable for extinguishing supporting fire.

**Protective Actions for Fire-fighters:** In fire conditions, wear a NIOSH/MSHA-approved self-contained breathing apparatus and full protective gear. Use water spray to keep fire-exposed containers cool.

**Specific Hazards:** During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

## Section 6 Accidental Release Measures

**Personal Precautions:** Evacuate personnel to safe area. Use proper personal protective equipment as indicated in Section 8. Provide adequate ventilation.

**Environmental Precautions:** Avoid runoff into storm sewers and ditches which lead to waterways.

**Containment and Cleanup:** Recover for reuse if not contaminated. Remove all sources of ignition. Sweep or vacuum up and place in a suitable container for proper disposal. Wash spill area with soap and water.

**Section 7 Handling & Storage**

**Precautions for Safe Handling:** Read label on container before using. Do not wear contact lenses when working with chemicals. Keep out of reach of children. Avoid contact with eyes, skin and clothing. Do not inhale dusts. Use with adequate ventilation. Avoid ingestion. Wash thoroughly after handling. Remove and wash clothing before reuse.

**Conditions for Safe Storage:** Store in a cool, dry, well-ventilated area away from incompatible substances.

**Section 8 Exposure Controls / Personal Protection**

Exposure Limits:	Chemical Name	ACGIH (TLV)	OSHA (PEL)	NIOSH (REL)
	Crystal violet	Not established	Not established	Not established

**Engineering controls:** Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower and fire extinguishing material. Personnel should wear safety glasses, goggles, or faceshield, lab coat or apron, appropriate protective gloves. Use adequate ventilation to keep airborne concentrations low.

**Respiratory protection:** None should be needed in normal laboratory handling at room temperatures. If dusty conditions prevail, work in fume hood or wear a NIOSH/MSHA-approved respirator.

**Section 9 Physical & Chemical Properties**

<b>Appearance:</b> Solid. Green crystalline powder.	<b>Evaporation rate ( = 1):</b> Data not available	<b>Partition coefficient:</b> Data not available
<b>Odor:</b> Musty odor.	<b>Flammability (solid/gas):</b> Data not available.	<b>Auto-ignition temperature:</b> Data not available
<b>Odor threshold:</b> Data not available.	<b>Explosion limits: Lower / Upper:</b> Data not available	<b>Decomposition temperature:</b> 215°C (419°F)
<b>pH:</b> Data not available.	<b>Vapor pressure (mm Hg):</b> Data not available	<b>Viscosity:</b> Data not available.
<b>Melting / Freezing point:</b> Decomposes	<b>Vapor density (Air = 1):</b> Data not available	<b>Molecular formula:</b> C <sub>25</sub> H <sub>30</sub> ClN <sub>3</sub>
<b>Boiling point:</b> Data not available	<b>Relative density (Specific gravity):</b> Data not available	<b>Molecular weight:</b> 407.99
<b>Flash point:</b> Not flammable	<b>Solubility(ies):</b> Soluble in water.	

**Section 10 Stability & Reactivity**

**Chemical stability:** Stable **Hazardous polymerization:** Will not occur.

**Conditions to avoid:** Excessive temperatures and heat. Protect from light.

**Incompatible materials:** Strong oxidizers, strong acids.

**Hazardous decomposition products:** Carbon oxides, nitrogen oxides, hydrogen chloride.

**Section 11 Toxicological Information**

**Acute toxicity:** Oral-rat LD50: 420 mg/kg  
**Skin corrosion/irritation:** Data not available  
**Serious eye damage/irritation:** Data not available  
**Respiratory or skin sensitization:** Data not available  
**Germ cell mutagenicity:** Data not available  
**Carcinogenicity:** Data not available  
 NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.  
 IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.  
 OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.  
**Reproductive toxicity:** Data not available  
**STOT-single exposure:** Data not available  
**STOT-repeated exposure:** Data not available  
**Aspiration hazard:** Data not available  
**Potential health effects:**  
 Inhalation: May cause respiratory tract irritation.  
 Ingestion: Harmful if swallowed. Causes gastrointestinal irritation with nausea, vomiting, and diarrhea.  
 Skin: May cause skin irritation.  
 Eyes: May cause eye irritation and possible damage. This product contains a cationic dye. Similar dyes have caused permanent injury to the cornea and conjunctiva in documented exposure cases with human or rabbit eyes.  
**Signs and symptoms of exposure:** To the best of our knowledge the chemical, physical and toxicological properties have not been thoroughly investigated. Specific data is not available. Exercise appropriate procedures to minimize potential hazards.  
**Additional information:** RTECS #: BO9000000

**Section 12 Ecological Information**

**Toxicity to fish:** No data available  
**Toxicity to daphnia and other aquatic invertebrates:** Daphnia magna (Water flea), EC50 = 0.24-5 mg/L/48 hours  
**Toxicity to algae:** Pseudokirchneriella subcapitata, EC50 = 0.025-0.8 mg/L/72 hours  
**Persistence and degradability:** No data available **Bioaccumulative potential:** No data available  
**Mobility in soil:** No data available **PBT and vPvB assessment:** No data available  
**Other adverse effects:** An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

**Section 13 Disposal Considerations**

These disposal guidelines are intended for the disposal of catalog-size quantities only. Federal regulations may apply to empty container. State and/or local regulations may be different. Dispose of in accordance with all local, state and federal regulations or contract with a licensed chemical disposal agency.

**Section 14 Transport Information (US DOT / CANADA TDG)**

**UN/NA number:** Not applicable **Shipping name:** Not Regulated **Reportable Quantity:** No **Marine pollutant:** No  
**Hazard class:** Not applicable **Packing group:** Not applicable  
**Exceptions:** Not applicable **2012 ERG Guide #** Not applicable

**Section 15 Regulatory Information**

A chemical is considered to be listed if the CAS number for the anhydrous form is on the Inventory list.

Component	TSCA	CERLCA (RQ)	RCRA code	DSL	NDSL	WHMIS Classification
Crystal violet	Listed	Not listed	Not listed	Listed	Not listed	D1B ; D2B

**Section 16 Additional Information**

The information contained herein is furnished without warranty of any kind. Employers should use this information only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees. NTP: National Toxicology Program, IARC: International Agency for Research on Cancer, OSHA: Occupational Safety and Health Administration, STOT: Specific Target Organ Toxicity, SE: Single Exposure, RE: Repeated Exposure, ERG: Emergency Response Guidebook.

# FLINN SCIENTIFIC, INC.

## Safety Data Sheet (SDS)

SDS #: 277.00

Revision Date: March 21, 2014

### SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

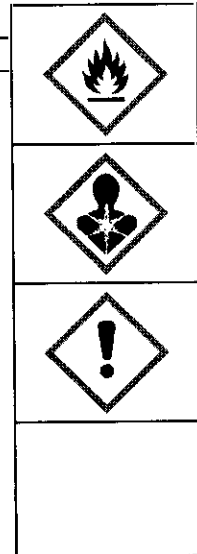
#### Crystal Violet Solution

Flinn Scientific, Inc. P.O. Box 219, Batavia, IL 60510 (800) 452-1261

CHEMTREC Emergency Phone Number: (800) 424-9300

Signal Word **DANGER**

Pictograms



### SECTION 2 — HAZARDS IDENTIFICATION

Hazard class: Flammable liquids (Category 2). Highly flammable liquid and vapor (H225). Keep away from heat, sparks, open flames, and hot surfaces. No smoking (P210).

Hazard class: Acute toxicity, oral (Category 4). Harmful if swallowed (H302). Do not eat, drink or smoke when using this product (P270).

Hazard class: Skin and serious eye damage, corrosion or irritation (Category 2, 2A). Causes skin and serious eye irritation (H315+H319).

Hazard class: Specific target organ toxicity, single exposure; respiratory tract irritation (Category 3). May cause respiratory irritation (H335). Avoid breathing mist, vapors or spray (P261).

Hazard class: Specific target organ toxicity, single exposure (Category 1). Causes damage to organs (H370).

### SECTION 3 — COMPOSITION, INFORMATION ON INGREDIENTS

Component Name	CAS Number	Formula	Formula Weight	Concentration
Crystal violet	548-62-9	C <sub>25</sub> H <sub>30</sub> ClN <sub>3</sub>	408.00	1% or less
Ethyl alcohol, denatured	64-17-5	C <sub>2</sub> H <sub>5</sub> OH	46.07	99%

### SECTION 4 — FIRST AID MEASURES

**If exposed or concerned:** Call a POISON CENTER or physician (P307+P311).

**If inhaled:** Remove victim to fresh air and keep at rest in a position comfortable for breathing (P304+P340). **If in eyes:** Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do so. Continue rinsing (P305+P351+P338). **If eye irritation persists:** Get medical advice or attention (P337+P313). **If on skin (or hair):** Immediately remove all contaminated clothing. Rinse skin with water (P303+P361+P353).

**If swallowed:** Rinse mouth. Call a POISON CENTER or physician if you feel unwell (P302+P301+P312).

### SECTION 5 — FIRE FIGHTING MEASURES

Class IB flammable liquid due to ethyl alcohol content.

Flash point: 21 °C

When heated, releases flammable fumes.

**In case of fire:** Use a tri-class dry chemical fire extinguisher (P370+P378).

NFPA CODE

H-2

F-3

R-0

### SECTION 6 — ACCIDENTAL RELEASE MEASURES

Remove all ignition sources and ventilate area. Contain the spill with sand or other inert absorbent material and deposit in a sealed bag or container. See Sections 8 and 13 for further information.



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**SECTION 7 — HANDLING AND STORAGE**

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Flinn Suggested Chemical Storage Pattern: Organic #9. Store with dyes, indicators and stains. Store in a dedicated flammables cabinet. If a flammables cabinet is not available, store in Flinn Saf-Stor™ can. Keep container tightly closed (P233). Keep cool (P235). Ground or bond container and receiving equipment (P240). Use explosion-proof electrical and ventilating equipment (P241). Use only non-sparking tools (P242). Use only in a hood or well-ventilated area (P271).

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**SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION**

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Wear protective gloves, protective clothing, and eye protection (P280). Wash hands thoroughly after handling (P264). Use only in a hood or well-ventilated area (P271). Will stain skin, clothing, and surfaces.  
Exposure guidelines: (as ethyl alcohol) PEL 1000 ppm (OSHA), Ceiling 1000 ppm (ACGIH)

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**SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES**

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Purple-violet liquid. Alcohol odor. Boiling point: 78 °C (ethyl alcohol)  
Biological stain.  
Gram stain recipe.

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**SECTION 10 — STABILITY AND REACTIVITY**

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Avoid any source of fire or ignition.  
Shelf life: Good, if stored properly.

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**SECTION 11 — TOXICOLOGICAL INFORMATION**

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Acute effects: Eye irritation, nausea, dizziness, headache. ORL-RAT LD<sub>50</sub>: 7060 mg/kg (as ethyl alcohol)  
Chronic effects: Liver damage, reproductive, teratogenic effects, IHL-RAT LC<sub>50</sub>: 20,000 ppm/10H (as ethyl alcohol)  
carcinogen. SKN-RBT LD<sub>50</sub>: N.A.  
Target organs: Eyes, skin, central nervous system, liver,  
reproductive system.  
N.A. = Not available, not all health aspects of this substance have been fully investigated.

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**SECTION 12 — ECOLOGICAL INFORMATION**

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Data not yet available.

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**SECTION 13 — DISPOSAL CONSIDERATIONS**

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Please review all federal, state and local regulations that may apply before proceeding.  
Flinn Suggested Disposal Method #26b is one option.

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**SECTION 14 — TRANSPORT INFORMATION**

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Shipping name: Ethyl alcohol. Hazard class: 3, Flammable liquid. UN number: UN1170.

N/A = Not applicable

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**SECTION 15 — REGULATORY INFORMATION**

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Not listed.

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**SECTION 16 — OTHER INFORMATION**

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This Safety Data Sheet (SDS) is for guidance and is based upon information and tests believed to be reliable. Flinn Scientific, Inc. makes no guarantee of the accuracy or completeness of the data and shall not be liable for any damages relating thereto. The data is offered solely for your consideration, investigation, and verification. The data should not be confused with local, state, federal or insurance mandates, regulations, or requirements and CONSTITUTE NO WARRANTY. Any use of this data and information must be determined by the science instructor to be in accordance with applicable local, state or federal laws and regulations. The conditions or methods of handling, storage, use and disposal of the product(s) described are beyond the control of Flinn Scientific, Inc. and may be beyond our knowledge. FOR THIS AND OTHER REASONS, WE DO NOT ASSUME RESPONSIBILITY AND EXPRESSLY DISCLAIM LIABILITY FOR LOSS, DAMAGE OR EXPENSE ARISING OUT OF OR IN ANY WAY CONNECTED WITH THE HANDLING, STORAGE, USE OR DISPOSAL OF THIS PRODUCT(S).

Consult your copy of the *Flinn Science Catalog/Reference Manual* for additional information about laboratory chemicals.  
Revision Date: March 21, 2014

## **SAFETY DATA SHEET**

### **CRYSTALTEX GLAZES (LEAD FREE – COPPER) – CTL SERIES (2)**

Mfg. American Art & Clay Co.

SDS's for the following Glazes:

CTL 12 MARDI GRAS  
CTL 20 ROYAL TURQUOISE  
CTL 22 MILKY WAY  
CTL 26 SEA MIST  
CTL 34 GRANADA  
CTL 35 NUTMEG

## SAFETY DATA SHEET

### CTL 12 MARDI GRAS

#### 1. Identification

##### Product identifier

Product name CTL 12 MARDI GRAS

Product number CTL 12 MARDI GRAS

##### Recommended use of the chemical and restrictions on use

Application ceramic glaze

##### Details of the supplier of the safety data sheet

Supplier American Art Clay Co Inc  
6060 Guion Road  
Indianapolis,  
IN 46254-1222  
USA  
Toll Free: 1-800-925-5195 ext. 1303  
Local: 1-317-243-0066 ext. 1303

##### Emergency telephone number

Emergency telephone 1 317 243 0066 ext. 1303 Mon-Fri, 0900-1700 EST

#### 2. Hazard(s) identification

##### Classification of the substance or mixture

Physical hazards Not Classified

Health hazards Not Classified

##### Label elements

Hazard statements NC Not Classified

##### Other hazards

none present

#### 3. Composition/information on ingredients

##### Mixtures

Composition comments Only ingredients listed above are notifiable for this product. If none are shown then all ingredients are exempt.

#### 4. First-aid measures

##### Description of first aid measures

General information --

Ingestion Do not induce vomiting. Rinse mouth thoroughly with water. Give a few small glasses of water or milk to drink. Get medical attention if any discomfort continues.

Skin Contact Wash skin thoroughly with soap and water.

Eye contact Rinse with water.

##### Most important symptoms and effects, both acute and delayed

Inhalation Read Section 2 for any specific precautions associated with this product. In general, breathing any type of dust / mist can and may aggravate irritation of the throat and lungs.

## CTL 12 MARDI GRAS

<b>Ingestion</b>	Read Section 2 for any specific precautions associated with the use of this product. Products with specific warnings about ingestion will give guidance there.
<b>Skin contact</b>	Read Section 2 for any specific precautions associated with the use of this product. In general most ceramic glazes, clays and special products will tend to have a drying effect on the skin and may cause some sensitivity to users with sensitive skin.
<b>Eye contact</b>	Read Section 2 for any specific precautions associated with the use of this product. In general most ceramic and special products contain materials that maybe abrasive to eyes. Keeping materials from contacting the eyes is prudent. If contact does occur, flush with clean water, do not rub.

### Indication of immediate medical attention and special treatment needed

**Notes for the doctor**                      Treat symptomatically.

### **5. Fire-fighting measures**

#### Extinguishing media

**Suitable extinguishing media**      Use fire-extinguishing media suitable for the surrounding fire.

#### Special hazards arising from the substance or mixture

**Specific hazards**                        The product is not believed to present a hazard due to its physical nature.

#### Advice for firefighters

**Special protective equipment for firefighters**      Use protective equipment appropriate for surrounding materials.

### **6. Accidental release measures**

#### Personal precautions, protective equipment and emergency procedures

**Personal precautions**                For personal protection, see Section 8.

#### Environmental precautions

**Environmental precautions**      Please read Section 2 completely. If any environmental warnings such as; H411 or H412 are listed in Section 2, please use appropriate procedures when disposing of product and container. Do not put materials into waterways or sewers.

#### Methods and material for containment and cleaning up

**Methods for cleaning up**              Collect spillage for reclamation or absorb in vermiculite, dry sand or similar material

**Reference to other sections**        For waste disposal, see Section 13. For personal protection, see Section 8.

### **7. Handling and storage**

#### Precautions for safe handling

**Usage precautions**                    Read label before use. Do not eat, drink or smoke when using this product. Good personal hygiene procedures should be implemented. Wash hands and any other contaminated areas of the body with soap and water before leaving the work site.

#### Conditions for safe storage, including any incompatibilities

**Storage precautions**                Store in tightly-closed, original container in a dry and cool place.

#### Specific end uses(s)

**Specific end use(s)**                    The identified uses for this product are detailed in Section 1.2.

### **8. Exposure Controls/personal protection**

## CTL 12 MARDI GRAS

### Control parameters

**Ingredient comments** Only ingredients listed in Section 3 are notifiable for this product. If none are shown then all ingredients are exempt.

### Exposure controls

**Appropriate engineering controls** No specific ventilation requirements unless the "FAN" pictogram is shown above or specified in Section 2.

**Eye/face protection** No specific eye protection required unless the "EYE PROTECTION" pictogram is shown above or specified in Section 2.

**Hand protection** No specific hand protection required unless the "HAND PROTECTION" pictogram is shown above or specified in Section 2.

**Hygiene measures** Using good personal hygiene practices is always appropriate. Keeping a clean work space, cleaning up properly when done, and not eating, drinking or smoking when using this product.

**Respiratory protection** No specific respiratory protection required unless the "RESPIRATOR" pictogram is shown above or specified in Section 2. Using the appropriate certified protection for the operation is important if required.

## 9. Physical and Chemical Properties

### Information on basic physical and chemical properties

<b>Appearance</b>	Colored liquid.
<b>Color</b>	Various colors.
<b>Odor</b>	Almost odorless.
<b>Odor threshold</b>	No information available.
<b>pH</b>	6-8
<b>Melting point</b>	No information available.
<b>Initial boiling point and range</b>	No information available.
<b>Flash point</b>	No information available.
<b>Evaporation rate</b>	No information available.
<b>Flammability (solid, gas)</b>	No information available.
<b>Upper/lower flammability or explosive limits</b>	No information available.
<b>Vapor pressure</b>	No information available.
<b>Relative density</b>	Greater than 1.0
<b>Solubility(ies)</b>	Not applicable.
<b>Partition coefficient</b>	No information available.
<b>Auto-ignition temperature</b>	Not applicable.
<b>Decomposition Temperature</b>	No information available.
<b>Viscosity</b>	No information available.
<b>Explosive properties</b>	none
<b>Oxidizing properties</b>	none

## CTL 12 MARDI GRAS

**Other information** Not applicable.

### 10. Stability and reactivity

**Reactivity** There are no known reactivity hazards associated with this product.

**Stability** No particular stability concerns.

**Possibility of hazardous reactions** None known.

**Conditions to avoid** None known.

**Materials to avoid** None known.

**Hazardous decomposition products** None known.

### 11. Toxicological information

#### Information on toxicological effects

**Toxicological effects** Please read Section 2 thoroughly to understand the toxicological risks, (if any) and precautions for safe use (if any).

#### Skin corrosion/irritation

#### Skin sensitization

**Skin sensitization** Based on available data the classification criteria are not met.

**Eye contact** May cause temporary eye irritation.

### 12. Ecological Information

**Ecotoxicity** Please read Section 2 completely. If any environmental warnings such as; H411 or H412 are listed in Section 2, please use appropriate procedures when disposing of product and container. Do not put materials into waterways or sewers.

#### Toxicity

**Toxicity** Please read Section 2 completely. If any environmental warnings such as; H411 or H412 are listed in Section 2, please use appropriate procedures when disposing of product and container. Do not put materials into waterways or sewers.

#### Persistence and degradability

**Persistence and degradability** No data available.

**Biodegradation** Not inherently biodegradable.

#### Bioaccumulative potential

**Partition coefficient** No information available.

#### Mobility in soil

**Mobility** Semi-mobile.

#### Results of PBT and vPvB assessment

**Results of PBT and vPvB assessment** This product does not contain any substances classified as PBT or vPvB.

## CTL 12 MARDI GRAS

### Other adverse effects

Other adverse effects           None known.

### 13. Disposal considerations

#### Waste treatment methods

##### **General information**

Dispose of waste product or used containers in accordance with local regulations. When handling waste, the safety precautions applying to handling of the product should be considered.

### 14. Transport information

#### **General**

The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, DoT).

#### UN Number

Not applicable.

#### UN proper shipping name

Not applicable.

#### Transport hazard class(es)

No transport warning sign required.

#### Packing group

Not applicable.

#### Environmental hazards

##### **Environmentally Hazardous Substance**

Please refer to Section 2 for any environmental hazards associated with this product. If H411/H412 warnings are shown then please verify packaging and labeling requirements for larger volumes.

#### Special precautions for user

Not applicable.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**   Not applicable.

### 15. Regulatory information

#### International Regulations

##### US State Regulations

###### **California Proposition 65 Carcinogens and Reproductive Toxins**

None of the ingredients are listed or exempt.

###### **Massachusetts "Right To Know" List**

*zinc oxide*

1-5%

*Hydrated Aluminium Silicate*

5-10%

*silica*

1-5%

## CTL 12 MARDI GRAS

*2-aminoethanol*

<1%

### **Rhode Island "Right To Know" List**

*Hydrated Aluminium Silicate*

5-10%

*silica*

1-5%

*2-aminoethanol*

<1%

### **Minnesota "Right To Know" List**

*zinc oxide*

1-5%

*Hydrated Aluminium Silicate*

5-10%

*silica*

1-5%

*2-aminoethanol*

<1%

### **New Jersey "Right To Know" List**

*zinc oxide*

1-5%

*Hydrated Aluminium Silicate*

5-10%

*silica*

1-5%

*2-aminoethanol*

<1%

### **Pennsylvania "Right To Know" List**

*zinc oxide*

1-5%

*Hydrated Aluminium Silicate*

5-10%

*silica*

1-5%

*2-aminoethanol*

<1%

### **Inventories**

#### **Canada - DSL/NDSL**

All the ingredients are listed or exempt.

#### **US - TSCA**

All the ingredients are listed or exempt.



**CTL 12 MARDI GRAS****US - TSCA 12(b) Export Notification**

All the ingredients are listed or exempt.

**16. Other information**

<b>General information</b>	The following are the top 5 materials by weight listed for New Jersey (if applicable):- Water 7732-18-5, Non Lead Frit65997-18-4, Hydrated Aluminum Silicate1332-58-7, Calcium Silicate 13983-17-0 Various Pigments
<b>Revision date</b>	7/28/2016
<b>Revision</b>	3
<b>Supersedes date</b>	7/27/2016
<b>SDS No.</b>	4983

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.

## SAFETY DATA SHEET

### CTL 20 ROYAL TURQUOISE

#### 1. Identification

##### Product identifier

Product name CTL 20 ROYAL TURQUOISE

Product number CTL 20 ROYAL TURQUOISE

##### Recommended use of the chemical and restrictions on use

Application ceramic glaze

##### Details of the supplier of the safety data sheet

Supplier American Art Clay Co Inc  
6060 Guion Road  
Indianapolis,  
IN 46254-1222  
USA  
Toll Free: 1-800-925-5195 ext. 1303  
Local: 1-317-243-0066 ext. 1303

##### Emergency telephone number

Emergency telephone 1 317 243 0066 ext. 1303 Mon-Fri, 0900-1700 EST

#### 2. Hazard(s) identification

##### Classification of the substance or mixture

Physical hazards Not Classified

Health hazards Acute Tox. 4 - H302

Environmental hazards Not Classified

##### Label elements

##### Pictogram



Signal word Warning

Hazard statements H302 Harmful if swallowed.

Precautionary statements P264 Wash contaminated skin thoroughly after handling.  
P270 Do not eat, drink or smoke when using this product.  
P301+P310 If swallowed: Immediately call a poison center/ doctor.  
P330 Rinse mouth.  
P501 Dispose of contents/ container in accordance with national regulations.

Supplemental label information WARNING: MAY BE HARMFUL IF SWALLOWED. Contains: COPPER. PRECAUTIONS: Keep in original container. Wash hands immediately after use. When using do not eat, drink or smoke. NOT FOR SPRAY APPLICATION. NOT FOR USE IN HEALTH CARE FACILITIES. KEEP OUT OF REACH OF CHILDREN. FIRST AID TREATMENT: If swallowed get prompt medical attention. For further information, contact a national poison control number; 800-222-1222.

##### Other hazards

none present

## CTL 20 ROYAL TURQUOISE

### 3. Composition/information on ingredients

#### Mixtures

<b>copper carb</b>	<b>1-5%</b>
CAS number: 7492-68-4	

#### Classification

Skin Irrit. 2 - H315  
 Eye Irrit. 2A - H319  
 STOT SE 3 - H335

The full text for all hazard statements is displayed in Section 16.

**Composition comments** Only ingredients listed above are notifiable for this product. If none are shown then all ingredients are exempt.

### 4. First-aid measures

#### Description of first aid measures

##### General information

--

##### Ingestion

Do not induce vomiting. Rinse mouth thoroughly with water. Give a few small glasses of water or milk to drink. Get medical attention if any discomfort continues.

##### Skin Contact

Wash skin thoroughly with soap and water.

##### Eye contact

Rinse with water.

#### Most important symptoms and effects, both acute and delayed

##### Inhalation

Read Section 2 for any specific precautions associated with this product. In general, breathing any type of dust / mist can and may aggravate irritation of the throat and lungs.

##### Ingestion

Read Section 2 for any specific precautions associated with the use of this product. Products with specific warnings about ingestion will give guidance there.

##### Skin contact

Read Section 2 for any specific precautions associated with the use of this product. In general most ceramic glazes, clays and special products will tend to have a drying effect on the skin and may cause some sensitivity to users with sensitive skin.

##### Eye contact

Read Section 2 for any specific precautions associated with the use of this product. In general most ceramic and special products contain materials that maybe abrasive to eyes. Keeping materials from contacting the eyes is prudent. If contact does occur, flush with clean water, do not rub.

#### Indication of immediate medical attention and special treatment needed

##### Notes for the doctor

Treat symptomatically.

### 5. Fire-fighting measures

#### Extinguishing media

**Suitable extinguishing media** Use fire-extinguishing media suitable for the surrounding fire.

#### Special hazards arising from the substance or mixture

##### Specific hazards

The product is not believed to present a hazard due to its physical nature.

#### Advice for firefighters

**Special protective equipment for firefighters** Use protective equipment appropriate for surrounding materials.

## CTL 20 ROYAL TURQUOISE

### 6. Accidental release measures

#### Personal precautions, protective equipment and emergency procedures

**Personal precautions** For personal protection, see Section 8.

#### Environmental precautions

**Environmental precautions** Please read Section 2 completely. If any environmental warnings such as; H411 or H412 are listed in Section 2, please use appropriate procedures when disposing of product and container. Do not put materials into waterways or sewers.

#### Methods and material for containment and cleaning up

**Methods for cleaning up** Collect spillage for reclamation or absorb in vermiculite, dry sand or similar material

**Reference to other sections** For waste disposal, see Section 13. For personal protection, see Section 8.

### 7. Handling and storage

#### Precautions for safe handling

**Usage precautions** Read label before use. Do not eat, drink or smoke when using this product. Good personal hygiene procedures should be implemented. Wash hands and any other contaminated areas of the body with soap and water before leaving the work site.

#### Conditions for safe storage, including any incompatibilities

**Storage precautions** Store in tightly-closed, original container in a dry and cool place.

#### Specific end uses(s)

**Specific end use(s)** The identified uses for this product are detailed in Section 1.2.

### 8. Exposure Controls/personal protection

#### Control parameters

**Ingredient comments** Only ingredients listed in Section 3 are notifiable for this product. If none are shown then all ingredients are exempt.

#### Exposure controls

**Appropriate engineering controls** No specific ventilations requirements unless the "FAN" pictogram is shown above or specified in Section 2.

**Eye/face protection** No specific eye protection required unless the "EYE PROTECTION" pictogram is shown above or specified in Section 2.

**Hand protection** No specific hand protection required unless the "HAND PROTECTION" pictogram is shown above or specified in Section 2.

**Hygiene measures** Using good personal hygiene practices is always appropriate. Keeping a clean work space, cleaning up properly when done, and not eating, drinking or smoking when using this product.

**Respiratory protection** No specific respiratory protection required unless the "RESPIRATOR" pictogram is shown above or specified in Section 2. Using the appropriate certified protection for the operation is important if required.

### 9. Physical and Chemical Properties

#### Information on basic physical and chemical properties

**Appearance** Colored liquid.

**Color** Various colors.

**CTL 20 ROYAL TURQUOISE**

<b>Odor</b>	Almost odorless.
<b>Odor threshold</b>	No information available.
<b>pH</b>	6-8
<b>Melting point</b>	No information available.
<b>Initial boiling point and range</b>	No information available.
<b>Flash point</b>	No information available.
<b>Evaporation rate</b>	No information available.
<b>Flammability (solid, gas)</b>	No information available.
<b>Upper/lower flammability or explosive limits</b>	No information available.
<b>Vapor pressure</b>	No information available.
<b>Relative density</b>	Greater than 1.0
<b>Solubility(ies)</b>	Not applicable.
<b>Partition coefficient</b>	No information available.
<b>Auto-ignition temperature</b>	Not applicable.
<b>Decomposition Temperature</b>	No information available.
<b>Viscosity</b>	No information available.
<b>Explosive properties</b>	none
<b>Oxidizing properties</b>	none
<b>Other information</b>	Not applicable.

**10. Stability and reactivity**

<b>Reactivity</b>	There are no known reactivity hazards associated with this product.
<b>Stability</b>	No particular stability concerns.
<b>Possibility of hazardous reactions</b>	None known.
<b>Conditions to avoid</b>	None known.
<b>Materials to avoid</b>	None known.
<b>Hazardous decomposition products</b>	None known.

**11. Toxicological information****Information on toxicological effects**

**Toxicological effects** Please read Section 2 thoroughly to understand the toxicological risks, (if any) and precautions for safe use (if any).

**Acute toxicity - oral**

**ATE oral (mg/kg)** 500.0

## CTL 20 ROYAL TURQUOISE

### Skin corrosion/irritation

### Skin sensitization

**Skin sensitization** Based on available data the classification criteria are not met.

**Eye contact** May cause temporary eye irritation.

## 12. Ecological Information

**Ecotoxicity** Please read Section 2 completely. If any environmental warnings such as; H411 or H412 are listed in Section 2, please use appropriate procedures when disposing of product and container. Do not put materials into waterways or sewers.

### Toxicity

**Toxicity** Please read Section 2 completely. If any environmental warnings such as; H411 or H412 are listed in Section 2, please use appropriate procedures when disposing of product and container. Do not put materials into waterways or sewers.

### Persistence and degradability

**Persistence and degradability** No data available.

**Biodegradation** Not inherently biodegradable.

### Bioaccumulative potential

**Partition coefficient** No information available.

### Mobility in soil

**Mobility** Semi-mobile.

### Results of PBT and vPvB assessment

**Results of PBT and vPvB assessment** This product does not contain any substances classified as PBT or vPvB.

### Other adverse effects

**Other adverse effects** None known.

## 13. Disposal considerations

### Waste treatment methods

**General information** Dispose of waste product or used containers in accordance with local regulations. When handling waste, the safety precautions applying to handling of the product should be considered.

## 14. Transport Information

**General** The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, DoT).

### UN Number

Not applicable.

### UN proper shipping name

Not applicable.

### Transport hazard class(es)

No transport warning sign required.

## CTL 20 ROYAL TURQUOISE

### Packing group

Not applicable.

### Environmental hazards

#### **Environmentally Hazardous Substance**

Please refer to Section 2 for any environmental hazards associated with this product. If H411/H412 warnings are shown then please verify packaging and labeling requirements for larger volumes.

### Special precautions for user

Not applicable.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not applicable.

## 15. Regulatory Information

### International Regulations

#### US State Regulations

##### **California Proposition 65 Carcinogens and Reproductive Toxins**

None of the ingredients are listed or exempt.

##### **Massachusetts "Right To Know" List**

*silica*

5-10%

*Hydrated Aluminium Silicate*

5-10%

*2-aminoethanol*

<1%

##### **Rhode Island "Right To Know" List**

*silica*

5-10%

*Hydrated Aluminium Silicate*

5-10%

*2-aminoethanol*

<1%

##### **Minnesota "Right To Know" List**

*silica*

5-10%

*Hydrated Aluminium Silicate*

5-10%

*2-aminoethanol*

<1%

##### **New Jersey "Right To Know" List**

*silica*

5-10%

**CTL 20 ROYAL TURQUOISE***Hydrated Aluminium Silicate*

5-10%

*2-aminoethanol*

&lt;1%

**Pennsylvania "Right To Know" List***silica*

5-10%

*Hydrated Aluminium Silicate*

5-10%

*2-aminoethanol*

&lt;1%

**Inventories****Canada - DSL/NDSL**

All the ingredients are listed or exempt.

**US - TSCA**

All the ingredients are listed or exempt.

**US - TSCA 12(b) Export Notification**

All the ingredients are listed or exempt.

**16. Other information**

<b>General information</b>	The following are the top 5 materials by weight listed for New Jersey (if applicable):- Water 7732-18-5, Non Lead Frit65997-18-4, Hydrated Aluminum Silicate1332-58-7, Calcium Silicate 13983-17-0 Various Pigments
<b>Revision date</b>	7/28/2016
<b>Revision</b>	4
<b>Supersedes date</b>	7/27/2016
<b>SDS No.</b>	4985
<b>Hazard statements in full</b>	H302 Harmful if swallowed. H315 Causes skin irritation. H319 Causes serious eye irritation. H335 May cause respiratory irritation.

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.



## SAFETY DATA SHEET

### CTL 22 MILKY WAY

#### 1. Identification

##### Product identifier

**Product name** CTL 22 MILKY WAY

**Product number** CTL 22 MILKY WAY

##### Recommended use of the chemical and restrictions on use

**Application** ceramic glaze

##### Details of the supplier of the safety data sheet

**Supplier** American Art Clay Co Inc  
6060 Guion Road  
Indianapolis,  
IN 46254-1222  
USA  
Toll Free: 1-800-925-5195 ext. 1303  
Local: 1-317-243-0066 ext. 1303

##### Emergency telephone number

**Emergency telephone** 1 317 243 0066 ext. 1303 Mon-Fri, 0900-1700 EST

#### 2. Hazard(s) identification

##### Classification of the substance or mixture

**Physical hazards** Not Classified

**Health hazards** Not Classified

**Environmental hazards** Not Classified

##### Label elements

**Hazard statements** NC Not Classified

##### Other hazards

none present

#### 3. Composition/information on ingredients

##### Mixtures

**Composition comments** Only ingredients listed above are notifiable for this product. If none are shown then all ingredients are exempt.

#### 4. First-aid measures

##### Description of first aid measures

**General information** --

**Ingestion** Do not induce vomiting. Rinse mouth thoroughly with water. Give a few small glasses of water or milk to drink. Get medical attention if any discomfort continues.

**Skin Contact** Wash skin thoroughly with soap and water.

**Eye contact** Rinse with water.

##### Most important symptoms and effects, both acute and delayed

# CTL 22 MILKY WAY

<b>Inhalation</b>	Read Section 2 for any specific precautions associated with this product. In general, breathing any type of dust / mist can and may aggravate irritation of the throat and lungs.
<b>Ingestion</b>	Read Section 2 for any specific precautions associated with the use of this product. Products with specific warnings about ingestion will give guidance there.
<b>Skin contact</b>	Read Section 2 for any specific precautions associated with the use of this product. In general most ceramic glazes, clays and special products will tend to have a drying effect on the skin and may cause some sensitivity to users with sensitive skin.
<b>Eye contact</b>	Read Section 2 for any specific precautions associated with the use of this product. In general most ceramic and special products contain materials that maybe abrasive to eyes. Keeping materials from contacting the eyes is prudent. If contact does occur, flush with clean water, do not rub.

**Indication of immediate medical attention and special treatment needed**

**Notes for the doctor**            Treat symptomatically.

**5. Fire-fighting measures**

**Extinguishing media**

**Suitable extinguishing media**    Use fire-extinguishing media suitable for the surrounding fire.

**Special hazards arising from the substance or mixture**

**Specific hazards**                    The product is not believed to present a hazard due to its physical nature.

**Advice for firefighters**

**Special protective equipment for firefighters**    Use protective equipment appropriate for surrounding materials.

**6. Accidental release measures**

**Personal precautions, protective equipment and emergency procedures**

**Personal precautions**            For personal protection, see Section 8.

**Environmental precautions**

**Environmental precautions**    Please read Section 2 completely. If any environmental warnings such as; H411 or H412 are listed in Section 2, please use appropriate procedures when disposing of product and container. Do not put materials into waterways or sewers.

**Methods and material for containment and cleaning up**

**Methods for cleaning up**            Collect spillage for reclamation or absorb in vermiculite, dry sand or similar material

**Reference to other sections**        For waste disposal, see Section 13. For personal protection, see Section 8.

**7. Handling and storage**

**Precautions for safe handling**

**Usage precautions**                    Read label before use. Do not eat, drink or smoke when using this product. Good personal hygiene procedures should be implemented. Wash hands and any other contaminated areas of the body with soap and water before leaving the work site.

**Conditions for safe storage, including any incompatibilities**

**Storage precautions**                    Store in tightly-closed, original container in a dry and cool place.

**Specific end uses(s)**

**Specific end use(s)**                    The identified uses for this product are detailed in Section 1.2.

## CTL 22 MILKY WAY

### 8. Exposure Controls/personal protection

#### Control parameters

**Ingredient comments** Only ingredients listed in Section 3 are notifiable for this product. If none are shown then all ingredients are exempt.

#### Exposure controls

**Appropriate engineering controls** No specific ventilation requirements unless the "FAN" pictogram is shown above or specified in Section 2.

**Eye/face protection** No specific eye protection required unless the "EYE PROTECTION" pictogram is shown above or specified in Section 2.

**Hand protection** No specific hand protection required unless the "HAND PROTECTION" pictogram is shown above or specified in Section 2.

**Hygiene measures** Using good personal hygiene practices is always appropriate. Keeping a clean work space, cleaning up properly when done, and not eating, drinking or smoking when using this product.

**Respiratory protection** No specific respiratory protection required unless the "RESPIRATOR" pictogram is shown above or specified in Section 2. Using the appropriate certified protection for the operation is important if required.

### 9. Physical and Chemical Properties

#### Information on basic physical and chemical properties

<b>Appearance</b>	Colored liquid.
<b>Color</b>	Various colors.
<b>Odor</b>	Almost odorless.
<b>Odor threshold</b>	No information available.
<b>pH</b>	6-8
<b>Melting point</b>	No information available.
<b>Initial boiling point and range</b>	No information available.
<b>Flash point</b>	No information available.
<b>Evaporation rate</b>	No information available.
<b>Flammability (solid, gas)</b>	No information available.
<b>Upper/lower flammability or explosive limits</b>	No information available.
<b>Vapor pressure</b>	No information available.
<b>Relative density</b>	Greater than 1.0
<b>Solubility(ies)</b>	Not applicable.
<b>Partition coefficient</b>	No information available.
<b>Auto-ignition temperature</b>	Not applicable.
<b>Decomposition Temperature</b>	No information available.
<b>Viscosity</b>	No information available.
<b>Explosive properties</b>	none

**CTL 22 MILKY WAY**

<b>Oxidizing properties</b>	none
<b>Other information</b>	Not applicable.

**10. Stability and reactivity**

<b>Reactivity</b>	There are no known reactivity hazards associated with this product.
<b>Stability</b>	No particular stability concerns.
<b>Possibility of hazardous reactions</b>	None known.
<b>Conditions to avoid</b>	None known.
<b>Materials to avoid</b>	None known.
<b>Hazardous decomposition products</b>	None known.

**11. Toxicological information****Information on toxicological effects**

**Toxicological effects** Please read Section 2 thoroughly to understand the toxicological risks, (if any) and precautions for safe use (if any).

**Skin corrosion/irritation****Skin sensitization**

**Skin sensitization** Based on available data the classification criteria are not met.

**Eye contact** May cause temporary eye irritation.

**12. Ecological Information**

**Ecotoxicity** Please read Section 2 completely. If any environmental warnings such as; H411 or H412 are listed in Section 2, please use appropriate procedures when disposing of product and container. Do not put materials into waterways or sewers.

**Toxicity**

**Toxicity** Please read Section 2 completely. If any environmental warnings such as; H411 or H412 are listed in Section 2, please use appropriate procedures when disposing of product and container. Do not put materials into waterways or sewers.

**Persistence and degradability**

**Persistence and degradability** No data available.

**Biodegradation** Not inherently biodegradable.

**Bioaccumulative potential**

**Partition coefficient** No information available.

**Mobility in soil**

**Mobility** Semi-mobile.

**Results of PBT and vPvB assessment**

## CTL 22 MILKY WAY

**Results of PBT and vPvB assessment**

This product does not contain any substances classified as PBT or vPvB.

**Other adverse effects****Other adverse effects**

None known.

**13. Disposal considerations****Waste treatment methods****General information**

Dispose of waste product or used containers in accordance with local regulations. When handling waste, the safety precautions applying to handling of the product should be considered.

**14. Transport information****General**

The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, DoT).

**UN Number**

Not applicable.

**UN proper shipping name**

Not applicable.

**Transport hazard class(es)**

No transport warning sign required.

**Packing group**

Not applicable.

**Environmental hazards****Environmentally Hazardous Substance**

Please refer to Section 2 for any environmental hazards associated with this product. If H411/H412 warnings are shown then please verify packaging and labeling requirements for larger volumes.

**Special precautions for user**

Not applicable.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not applicable.

**15. Regulatory information****International Regulations****US State Regulations****California Proposition 65 Carcinogens and Reproductive Toxins**

None of the ingredients are listed or exempt.

**Massachusetts "Right To Know" List**

*2-aminoethanol*

<1%

*Hydrated Aluminium Silicate*

1-5%

**CTL 22 MILKY WAY****Rhode Island "Right To Know" List***2-aminoethanol*

&lt;1%

*Hydrated Aluminium Silicate*

1-5%

**Minnesota "Right To Know" List***2-aminoethanol*

&lt;1%

*Hydrated Aluminium Silicate*

1-5%

**New Jersey "Right To Know" List***2-aminoethanol*

&lt;1%

*Hydrated Aluminium Silicate*

1-5%

**Pennsylvania "Right To Know" List***2-aminoethanol*

&lt;1%

*Hydrated Aluminium Silicate*

1-5%

**Inventories****Canada - DSL/NDSL**

All the ingredients are listed or exempt.

**US - TSCA**

All the ingredients are listed or exempt.

**US - TSCA 12(b) Export Notification**

All the ingredients are listed or exempt.

**16. Other information**

<b>General information</b>	The following are the top 5 materials by weight listed for New Jersey (if applicable):- Water 7732-18-5, Non Lead Frit65997-18-4, Hydrated Aluminum Silicate1332-58-7, Calcium Silicate 13983-17-0 Various Pigments
<b>Revision date</b>	7/28/2016
<b>Revision</b>	3
<b>Supersedes date</b>	7/27/2016
<b>SDS No.</b>	4986

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.

## SAFETY DATA SHEET

### CTL 26 SEA MIST

#### 1. Identification

##### Product identifier

**Product name** CTL 26 SEA MIST  
**Product number** CTL 26 SEA MIST

##### Recommended use of the chemical and restrictions on use

**Application** ceramic glaze

##### Details of the supplier of the safety data sheet

**Supplier** American Art Clay Co Inc  
 6060 Guion Road  
 Indianapolis,  
 IN 46254-1222  
 USA  
 Toll Free: 1-800-925-5195 ext. 1303  
 Local: 1-317-243-0066 ext. 1303

##### Emergency telephone number

**Emergency telephone** 1 317 243 0066 ext. 1303 Mon-Fri, 0900-1700 EST

#### 2. Hazard(s) identification

##### Classification of the substance or mixture

**Physical hazards** Not Classified  
**Health hazards** Acute Tox. 4 - H302  
**Environmental hazards** Not Classified

##### Label elements

##### Pictogram



**Signal word** Warning  
**Hazard statements** H302 Harmful if swallowed.  
**Precautionary statements** P264 Wash contaminated skin thoroughly after handling.  
 P270 Do not eat, drink or smoke when using this product.  
 P301+P310 If swallowed: Immediately call a poison center/ doctor.  
 P330 Rinse mouth.  
 P501 Dispose of contents/ container in accordance with national regulations.

##### Supplemental label information

WARNING: MAY BE HARMFUL IF SWALLOWED. Contains: COPPER. PRECAUTIONS: Keep in original container. Wash hands immediately after use. When using do not eat, drink or smoke. NOT FOR SPRAY APPLICATION. NOT FOR USE IN HEALTH CARE FACILITIES. KEEP OUT OF REACH OF CHILDREN. FIRST AID TREATMENT: If swallowed get prompt medical attention. For further information, contact a national poison control number; 800-222-1222.

##### Other hazards

none present

## CTL 26 SEA MIST

### 3. Composition/information on ingredients

#### Mixtures

<b>copper carb</b>	<b>1-5%</b>
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CAS number: 7492-68-4

#### Classification

Skin Irrit. 2 - H315  
 Eye Irrit. 2A - H319  
 STOT SE 3 - H335

The full text for all hazard statements is displayed in Section 16.

**Composition comments**      Only ingredients listed above are notifiable for this product. If none are shown then all ingredients are exempt.

### 4. First-aid measures

#### Description of first aid measures

##### General information

--

##### Ingestion

Do not induce vomiting. Rinse mouth thoroughly with water. Give a few small glasses of water or milk to drink. Get medical attention if any discomfort continues.

##### Skin Contact

Wash skin thoroughly with soap and water.

##### Eye contact

Rinse with water.

#### Most important symptoms and effects, both acute and delayed

##### Inhalation

Read Section 2 for any specific precautions associated with this product. In general, breathing any type of dust / mist can and may aggravate irritation of the throat and lungs.

##### Ingestion

Read Section 2 for any specific precautions associated with the use of this product. Products with specific warnings about ingestion will give guidance there.

##### Skin contact

Read Section 2 for any specific precautions associated with the use of this product. In general most ceramic glazes, clays and special products will tend to have a drying effect on the skin and may cause some sensitivity to users with sensitive skin.

##### Eye contact

Read Section 2 for any specific precautions associated with the use of this product. In general most ceramic and special products contain materials that maybe abrasive to eyes. Keeping materials from contacting the eyes is prudent. If contact does occur, flush with clean water, do not rub.

#### Indication of immediate medical attention and special treatment needed

##### Notes for the doctor

Treat symptomatically.

### 5. Fire-fighting measures

#### Extinguishing media

**Suitable extinguishing media**      Use fire-extinguishing media suitable for the surrounding fire.

#### Special hazards arising from the substance or mixture

##### Specific hazards

The product is not believed to present a hazard due to its physical nature.

#### Advice for firefighters

**Special protective equipment for firefighters**      Use protective equipment appropriate for surrounding materials.



## CTL 26 SEA MIST

### 6. Accidental release measures

#### Personal precautions, protective equipment and emergency procedures

**Personal precautions** For personal protection, see Section 8.

#### Environmental precautions

**Environmental precautions** Please read Section 2 completely. If any environmental warnings such as; H411 or H412 are listed in Section 2, please use appropriate procedures when disposing of product and container. Do not put materials into waterways or sewers.

#### Methods and material for containment and cleaning up

**Methods for cleaning up** Collect spillage for reclamation or absorb in vermiculite, dry sand or similar material

**Reference to other sections** For waste disposal, see Section 13. For personal protection, see Section 8.

### 7. Handling and storage

#### Precautions for safe handling

**Usage precautions** Read label before use. Do not eat, drink or smoke when using this product. Good personal hygiene procedures should be implemented. Wash hands and any other contaminated areas of the body with soap and water before leaving the work site.

#### Conditions for safe storage, including any incompatibilities

**Storage precautions** Store in tightly-closed, original container in a dry and cool place.

#### Specific end uses(s)

**Specific end use(s)** The identified uses for this product are detailed in Section 1.2.

### 8. Exposure Controls/personal protection

#### Control parameters

**Ingredient comments** Only ingredients listed in Section 3 are notifiable for this product. If none are shown then all ingredients are exempt.

#### Exposure controls

**Appropriate engineering controls** No specific ventilations requirements unless the "FAN" pictogram is shown above or specified in Section 2.

**Eye/face protection** No specific eye protection required unless the "EYE PROTECTION" pictogram is shown above or specified in Section 2.

**Hand protection** No specific hand protection required unless the "HAND PROTECTION" pictogram is shown above or specified in Section 2.

**Hygiene measures** Using good personal hygiene practices is always appropriate. Keeping a clean work space, cleaning up properly when done, and not eating, drinking or smoking when using this product.

**Respiratory protection** No specific respiratory protection required unless the "RESPIRATOR" pictogram is shown above or specified in Section 2. Using the appropriate certified protection for the operation is important if required.

### 9. Physical and Chemical Properties

#### Information on basic physical and chemical properties

**Appearance** Colored liquid.

**Color** Various colors.

**CTL 26 SEA MIST**

<b>Odor</b>	Almost odorless.
<b>Odor threshold</b>	No information available.
<b>pH</b>	6-8
<b>Melting point</b>	No information available.
<b>Initial boiling point and range</b>	No information available.
<b>Flash point</b>	No information available.
<b>Evaporation rate</b>	No information available.
<b>Flammability (solid, gas)</b>	No information available.
<b>Upper/lower flammability or explosive limits</b>	No information available.
<b>Vapor pressure</b>	No information available.
<b>Relative density</b>	Greater than 1.0
<b>Solubility(ies)</b>	Not applicable.
<b>Partition coefficient</b>	No information available.
<b>Auto-ignition temperature</b>	Not applicable.
<b>Decomposition Temperature</b>	No information available.
<b>Viscosity</b>	No information available.
<b>Explosive properties</b>	none
<b>Oxidizing properties</b>	none
<b>Other information</b>	Not applicable.

**10. Stability and reactivity**

<b>Reactivity</b>	There are no known reactivity hazards associated with this product.
<b>Stability</b>	No particular stability concerns.
<b>Possibility of hazardous reactions</b>	None known.
<b>Conditions to avoid</b>	None known.
<b>Materials to avoid</b>	None known.
<b>Hazardous decomposition products</b>	None known.

**11. Toxicological information****Information on toxicological effects**

<b>Toxicological effects</b>	Please read Section 2 thoroughly to understand the toxicological risks, (if any) and precautions for safe use (if any).
<b>Acute toxicity - oral</b>	
<b>ATE oral (mg/kg)</b>	500.0

## CTL 26 SEA MIST

### Skin corrosion/irritation

### Skin sensitization

**Skin sensitization** Based on available data the classification criteria are not met.

### **Eye contact**

May cause temporary eye irritation.

## 12. Ecological Information

### **Ecotoxicity**

Please read Section 2 completely. If any environmental warnings such as; H411 or H412 are listed in Section 2, please use appropriate procedures when disposing of product and container. Do not put materials into waterways or sewers.

### Toxicity

### **Toxicity**

Please read Section 2 completely. If any environmental warnings such as; H411 or H412 are listed in Section 2, please use appropriate procedures when disposing of product and container. Do not put materials into waterways or sewers.

### Persistence and degradability

**Persistence and degradability** No data available.

### **Biodegradation**

Not inherently biodegradable.

### Bioaccumulative potential

**Partition coefficient** No information available.

### Mobility in soil

**Mobility** Semi-mobile.

### Results of PBT and vPvB assessment

**Results of PBT and vPvB assessment** This product does not contain any substances classified as PBT or vPvB.

### Other adverse effects

**Other adverse effects** None known.

## 13. Disposal considerations

### Waste treatment methods

### **General information**

Dispose of waste product or used containers in accordance with local regulations. When handling waste, the safety precautions applying to handling of the product should be considered.

## 14. Transport Information

### **General**

The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, DoT).

### UN Number

Not applicable.

### UN proper shipping name

Not applicable.

### Transport hazard class(es)

No transport warning sign required.

## CTL 26 SEA MIST

### Packing group

Not applicable.

### Environmental hazards

#### **Environmentally Hazardous Substance**

Please refer to Section 2 for any environmental hazards associated with this product. If H411/H412 warnings are shown then please verify packaging and labeling requirements for larger volumes.

### Special precautions for user

Not applicable.

Transport in bulk according to Not applicable.

Annex II of MARPOL 73/78

and the IBC Code

## 15. Regulatory information

### International Regulations

#### US State Regulations

##### **California Proposition 65 Carcinogens and Reproductive Toxins**

None of the ingredients are listed or exempt.

##### **Massachusetts "Right To Know" List**

*Hydrated Aluminium Silicate*

1-5%

*2-aminoethanol*

<1%

*silica*

<1%

##### **Rhode Island "Right To Know" List**

*Hydrated Aluminium Silicate*

1-5%

*2-aminoethanol*

<1%

*silica*

<1%

##### **Minnesota "Right To Know" List**

*Hydrated Aluminium Silicate*

1-5%

*2-aminoethanol*

<1%

*silica*

<1%

##### **New Jersey "Right To Know" List**

*Hydrated Aluminium Silicate*

1-5%

**CTL 26 SEA MIST***2-aminoethanol*

&lt;1%

*silica*

&lt;1%

**Pennsylvania "Right To Know" List***Hydrated Aluminium Silicate*

1-5%

*2-aminoethanol*

&lt;1%

*silica*

&lt;1%

**Inventories****Canada - DSL/NDSL**

All the ingredients are listed or exempt.

**US - TSCA**

All the ingredients are listed or exempt.

**US - TSCA 12(b) Export Notification**

All the ingredients are listed or exempt.

**16. Other Information**

<b>General information</b>	The following are the top 5 materials by weight listed for New Jersey (if applicable):- Water 7732-18-5, Non Lead Frit65997-18-4, Hydrated Aluminum Silicate1332-58-7, Calcium Silicate 13983-17-0 Various Pigments
<b>Revision date</b>	7/28/2016
<b>Revision</b>	4
<b>Supersedes date</b>	7/27/2016
<b>SDS No.</b>	4988
<b>Hazard statements in full</b>	H302 Harmful if swallowed. H315 Causes skin irritation. H319 Causes serious eye irritation. H335 May cause respiratory irritation.

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.

## SAFETY DATA SHEET

### CTL 34 GRANADA

#### 1. Identification

##### Product identifier

Product name CTL 34 GRANADA

Product number CTL 34 GRANADA

##### Recommended use of the chemical and restrictions on use

Application ceramic glaze

##### Details of the supplier of the safety data sheet

Supplier American Art Clay Co Inc  
6060 Guion Road  
Indianapolis,  
IN 46254-1222  
USA  
Toll Free: 1-800-925-5195 ext. 1303  
Local: 1-317-243-0066 ext. 1303

##### Emergency telephone number

Emergency telephone 1 317 243 0066 ext. 1303 Mon-Fri, 0900-1700 EST

#### 2. Hazard(s) identification

##### Classification of the substance or mixture

Physical hazards Not Classified

Health hazards Not Classified

Environmental hazards Not Classified

##### Label elements

Hazard statements NC Not Classified

##### Other hazards

none present

#### 3. Composition/information on ingredients

##### Mixtures

copper carb	<1%
CAS number: 7492-68-4	

##### Classification

Skin Irrit. 2 - H315  
Eye Irrit. 2A - H319  
STOT SE 3 - H335

The full text for all hazard statements is displayed in Section 16.

Composition comments Only ingredients listed above are notifiable for this product. If none are shown then all ingredients are exempt.

#### 4. First-aid measures

##### Description of first aid measures

## CTL 34 GRANADA

<b>General information</b>	--
<b>Ingestion</b>	Do not induce vomiting. Rinse mouth thoroughly with water. Give a few small glasses of water or milk to drink. Get medical attention if any discomfort continues.
<b>Skin Contact</b>	Wash skin thoroughly with soap and water.
<b>Eye contact</b>	Rinse with water.

### **Most important symptoms and effects, both acute and delayed**

<b>Inhalation</b>	Read Section 2 for any specific precautions associated with this product. In general, breathing any type of dust / mist can and may aggravate irritation of the throat and lungs.
<b>Ingestion</b>	Read Section 2 for any specific precautions associated with the use of this product. Products with specific warnings about ingestion will give guidance there.
<b>Skin contact</b>	Read Section 2 for any specific precautions associated with the use of this product. In general most ceramic glazes, clays and special products will tend to have a drying effect on the skin and may cause some sensitivity to users with sensitive skin.
<b>Eye contact</b>	Read Section 2 for any specific precautions associated with the use of this product. In general most ceramic and special products contain materials that maybe abrasive to eyes. Keeping materials from contacting the eyes is prudent. If contact does occur, flush with clean water, do not rub.

### **Indication of immediate medical attention and special treatment needed**

<b>Notes for the doctor</b>	Treat symptomatically.
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### **5. Fire-fighting measures**

#### **Extinguishing media**

<b>Suitable extinguishing media</b>	Use fire-extinguishing media suitable for the surrounding fire.
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#### **Special hazards arising from the substance or mixture**

<b>Specific hazards</b>	The product is not believed to present a hazard due to its physical nature.
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#### **Advice for firefighters**

<b>Special protective equipment for firefighters</b>	Use protective equipment appropriate for surrounding materials.
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### **6. Accidental release measures**

#### **Personal precautions, protective equipment and emergency procedures**

<b>Personal precautions</b>	For personal protection, see Section 8.
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#### **Environmental precautions**

<b>Environmental precautions</b>	Please read Section 2 completely. If any environmental warnings such as; H411 or H412 are listed in Section 2, please use appropriate procedures when disposing of product and container. Do not put materials into waterways or sewers.
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#### **Methods and material for containment and cleaning up**

<b>Methods for cleaning up</b>	Collect spillage for reclamation or absorb in vermiculite, dry sand or similar material
--------------------------------	---

<b>Reference to other sections</b>	For waste disposal, see Section 13. For personal protection, see Section 8.
------------------------------------	---

### **7. Handling and storage**

#### **Precautions for safe handling**

## CTL 34 GRANADA

**Usage precautions** Read label before use. Do not eat, drink or smoke when using this product. Good personal hygiene procedures should be implemented. Wash hands and any other contaminated areas of the body with soap and water before leaving the work site.

### Conditions for safe storage, including any incompatibilities

**Storage precautions** Store in tightly-closed, original container in a dry and cool place.

### Specific end uses(s)

**Specific end use(s)** The identified uses for this product are detailed in Section 1.2.

## 8. Exposure Controls/personal protection

### Control parameters

**Ingredient comments** Only ingredients listed in Section 3 are notifiable for this product. If none are shown then all ingredients are exempt.

### Exposure controls

**Appropriate engineering controls** No specific ventilations requirements unless the "FAN" pictogram is shown above or specified in Section 2.

**Eye/face protection** No specific eye protection required unless the "EYE PROTECTION" pictogram is shown above or specified in Section 2.

**Hand protection** No specific hand protection required unless the "HAND PROTECTION" pictogram is shown above or specified in Section 2.

**Hygiene measures** Using good personal hygiene practices is always appropriate. Keeping a clean work space, cleaning up properly when done, and not eating, drinking or smoking when using this product.

**Respiratory protection** No specific respiratory protection required unless the "RESPIRATOR" pictogram is shown above or specified in Section 2. Using the appropriate certified protection for the operation is important if required.

## 9. Physical and Chemical Properties

### Information on basic physical and chemical properties

<b>Appearance</b>	Colored liquid.
<b>Color</b>	Various colors.
<b>Odor</b>	Almost odorless.
<b>Odor threshold</b>	No information available.
<b>pH</b>	6-8
<b>Melting point</b>	No information available.
<b>Initial boiling point and range</b>	No information available.
<b>Flash point</b>	No information available.
<b>Evaporation rate</b>	No information available.
<b>Flammability (solid, gas)</b>	No information available.
<b>Upper/lower flammability or explosive limits</b>	No information available.
<b>Vapor pressure</b>	No information available.
<b>Relative density</b>	Greater than 1.0



**CTL 34 GRANADA**

<b>Solubility(ies)</b>	Not applicable.
<b>Partition coefficient</b>	No information available.
<b>Auto-ignition temperature</b>	Not applicable.
<b>Decomposition Temperature</b>	No information available.
<b>Viscosity</b>	No information available.
<b>Explosive properties</b>	none
<b>Oxidizing properties</b>	none
<b>Other information</b>	Not applicable.

**10. Stability and reactivity**

<b>Reactivity</b>	There are no known reactivity hazards associated with this product.
<b>Stability</b>	No particular stability concerns.
<b>Possibility of hazardous reactions</b>	None known.
<b>Conditions to avoid</b>	None known.
<b>Materials to avoid</b>	None known.
<b>Hazardous decomposition products</b>	None known.

**11. Toxicological information****Information on toxicological effects**

**Toxicological effects** Please read Section 2 thoroughly to understand the toxicological risks, (if any) and precautions for safe use (if any).

**Skin corrosion/irritation****Skin sensitization**

**Skin sensitization** Based on available data the classification criteria are not met.

**Eye contact** May cause temporary eye irritation.

**12. Ecological Information**

**Ecotoxicity** Please read Section 2 completely. If any environmental warnings such as; H411 or H412 are listed in Section 2, please use appropriate procedures when disposing of product and container. Do not put materials into waterways or sewers.

**Toxicity**

**Toxicity** Please read Section 2 completely. If any environmental warnings such as; H411 or H412 are listed in Section 2, please use appropriate procedures when disposing of product and container. Do not put materials into waterways or sewers.

**Persistence and degradability**

**Persistence and degradability** No data available.

**CTL 34 GRANADA**

**Biodegradation** Not inherently biodegradable.

**Bioaccumulative potential**

**Partition coefficient** No information available.

**Mobility in soil**

**Mobility** Semi-mobile.

**Results of PBT and vPvB assessment**

**Results of PBT and vPvB assessment** This product does not contain any substances classified as PBT or vPvB.

**Other adverse effects**

**Other adverse effects** None known.

**13. Disposal considerations****Waste treatment methods**

**General information** Dispose of waste product or used containers in accordance with local regulations. When handling waste, the safety precautions applying to handling of the product should be considered.

**14. Transport information**

**General** The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, DoT).

**UN Number**

Not applicable.

**UN proper shipping name**

Not applicable.

**Transport hazard class(es)**

No transport warning sign required.

**Packing group**

Not applicable.

**Environmental hazards****Environmentally Hazardous Substance**

Please refer to Section 2 for any environmental hazards associated with this product. If H411/H412 warnings are shown then please verify packaging and labeling requirements for larger volumes.

**Special precautions for user**

Not applicable.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not applicable.

**15. Regulatory information****International Regulations****US State Regulations**

## CTL 34 GRANADA

### California Proposition 65 Carcinogens and Reproductive Toxins

Known to the State of California to cause developmental and reproductive toxicity.

*lithium carb*

1-5%

### Massachusetts "Right To Know" List

*Rutile*

1-5%

*silica*

1-5%

*Hydrated Aluminium Silicate*

1-5%

*lithium carb*

1-5%

*2-aminoethanol*

<1%

### Rhode Island "Right To Know" List

*Rutile*

1-5%

*silica*

1-5%

*Hydrated Aluminium Silicate*

1-5%

*2-aminoethanol*

<1%

### Minnesota "Right To Know" List

*Rutile*

1-5%

*silica*

1-5%

*Hydrated Aluminium Silicate*

1-5%

*2-aminoethanol*

<1%

### New Jersey "Right To Know" List

*Rutile*

1-5%

*silica*

1-5%

*Hydrated Aluminium Silicate*

1-5%

*lithium carb*

1-5%

**CTL 34 GRANADA***2-aminoethanol*

&lt;1%

**Pennsylvania "Right To Know" List***Rutile*

1-5%

*silica*

1-5%

*Hydrated Aluminium Silicate*

1-5%

*2-aminoethanol*

&lt;1%

**Inventories****Canada - DSL/NDSL**

All the ingredients are listed or exempt.

**US - TSCA**

All the ingredients are listed or exempt.

**US - TSCA 12(b) Export Notification**

All the ingredients are listed or exempt.

**16. Other information**

<b>General information</b>	The following are the top 5 materials by weight listed for New Jersey (if applicable):- Water 7732-18-5, Non Lead Frit65997-18-4, Hydrated Aluminum Silicate1332-58-7, Calcium Silicate 13983-17-0 Various Pigments
<b>Revision date</b>	11/16/2016
<b>Revision</b>	4
<b>Supersedes date</b>	7/28/2016
<b>SDS No.</b>	4993
<b>Hazard statements in full</b>	H315 Causes skin irritation. H319 Causes serious eye irritation. H335 May cause respiratory irritation.

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.

## SAFETY DATA SHEET

### CTL 35 NUTMEG

#### 1. Identification

##### Product identifier

Product name CTL 35 NUTMEG  
Product number CTL 35 NUTMEG

##### Recommended use of the chemical and restrictions on use

Application ceramic glaze

##### Details of the supplier of the safety data sheet

Supplier American Art Clay Co Inc  
6060 Guion Road  
Indianapolis,  
IN 46254-1222  
USA  
Toll Free: 1-800-925-5195 ext. 1303  
Local: 1-317-243-0066 ext. 1303

##### Emergency telephone number

Emergency telephone 1 317 243 0066 ext. 1303 Mon-Fri, 0900-1700 EST

#### 2. Hazard(s) identification

##### Classification of the substance or mixture

Physical hazards Not Classified  
Health hazards Not Classified  
Environmental hazards Not Classified

##### Label elements

Hazard statements NC Not Classified

##### Other hazards

none present

#### 3. Composition/information on ingredients

##### Mixtures

Composition comments Only ingredients listed above are notifiable for this product. If none are shown then all ingredients are exempt.

#### 4. First-aid measures

##### Description of first aid measures

General information --

Ingestion Do not induce vomiting. Rinse mouth thoroughly with water. Give a few small glasses of water or milk to drink. Get medical attention if any discomfort continues.

Skin Contact Wash skin thoroughly with soap and water.

Eye contact Rinse with water.

##### Most important symptoms and effects, both acute and delayed

## CTL 35 NUTMEG

<b>Inhalation</b>	Read Section 2 for any specific precautions associated with this product. In general, breathing any type of dust / mist can and may aggravate irritation of the throat and lungs.
<b>Ingestion</b>	Read Section 2 for any specific precautions associated with the use of this product. Products with specific warnings about ingestion will give guidance there.
<b>Skin contact</b>	Read Section 2 for any specific precautions associated with the use of this product. In general most ceramic glazes, clays and special products will tend to have a drying effect on the skin and may cause some sensitivity to users with sensitive skin.
<b>Eye contact</b>	Read Section 2 for any specific precautions associated with the use of this product. In general most ceramic and special products contain materials that maybe abrasive to eyes. Keeping materials from contacting the eyes is prudent. If contact does occur, flush with clean water, do not rub.

### **Indication of immediate medical attention and special treatment needed**

**Notes for the doctor** Treat symptomatically.

### **5. Fire-fighting measures**

#### **Extinguishing media**

**Suitable extinguishing media** Use fire-extinguishing media suitable for the surrounding fire.

#### **Special hazards arising from the substance or mixture**

**Specific hazards** The product is not believed to present a hazard due to its physical nature.

#### **Advice for firefighters**

**Special protective equipment for firefighters** Use protective equipment appropriate for surrounding materials.

### **6. Accidental release measures**

#### **Personal precautions, protective equipment and emergency procedures**

**Personal precautions** For personal protection, see Section 8.

#### **Environmental precautions**

**Environmental precautions** Please read Section 2 completely. If any environmental warnings such as; H411 or H412 are listed in Section 2, please use appropriate procedures when disposing of product and container. Do not put materials into waterways or sewers.

#### **Methods and material for containment and cleaning up**

**Methods for cleaning up** Collect spillage for reclamation or absorb in vermiculite, dry sand or similar material

**Reference to other sections** For waste disposal, see Section 13. For personal protection, see Section 8.

### **7. Handling and storage**

#### **Precautions for safe handling**

**Usage precautions** Read label before use. Do not eat, drink or smoke when using this product. Good personal hygiene procedures should be implemented. Wash hands and any other contaminated areas of the body with soap and water before leaving the work site.

#### **Conditions for safe storage, including any incompatibilities**

**Storage precautions** Store in tightly-closed, original container in a dry and cool place.

#### **Specific end uses(s)**

**Specific end use(s)** The identified uses for this product are detailed in Section 1.2.

## CTL 35 NUTMEG

### 8. Exposure Controls/personal protection

#### Control parameters

**Ingredient comments** Only ingredients listed in Section 3 are notifiable for this product. If none are shown then all ingredients are exempt.

#### Exposure controls

**Appropriate engineering controls** No specific ventilation requirements unless the "FAN" pictogram is shown above or specified in Section 2.

**Eye/face protection** No specific eye protection required unless the "EYE PROTECTION" pictogram is shown above or specified in Section 2.

**Hand protection** No specific hand protection required unless the "HAND PROTECTION" pictogram is shown above or specified in Section 2.

**Hygiene measures** Using good personal hygiene practices is always appropriate. Keeping a clean work space, cleaning up properly when done, and not eating, drinking or smoking when using this product.

**Respiratory protection** No specific respiratory protection required unless the "RESPIRATOR" pictogram is shown above or specified in Section 2. Using the appropriate certified protection for the operation is important if required.

### 9. Physical and Chemical Properties

#### Information on basic physical and chemical properties

<b>Appearance</b>	Colored liquid.
<b>Color</b>	Various colors.
<b>Odor</b>	Almost odorless.
<b>Odor threshold</b>	No information available.
<b>pH</b>	6-8
<b>Melting point</b>	No information available.
<b>Initial boiling point and range</b>	No information available.
<b>Flash point</b>	No information available.
<b>Evaporation rate</b>	No information available.
<b>Flammability (solid, gas)</b>	No information available.
<b>Upper/lower flammability or explosive limits</b>	No information available.
<b>Vapor pressure</b>	No information available.
<b>Relative density</b>	Greater than 1.0
<b>Solubility(ies)</b>	Not applicable.
<b>Partition coefficient</b>	No information available.
<b>Auto-ignition temperature</b>	Not applicable.
<b>Decomposition Temperature</b>	No information available.
<b>Viscosity</b>	No information available.
<b>Explosive properties</b>	none

## CTL 35 NUTMEG

<b>Oxidizing properties</b>	none
<b>Other information</b>	Not applicable.

### 10. Stability and reactivity

<b>Reactivity</b>	There are no known reactivity hazards associated with this product.
<b>Stability</b>	No particular stability concerns.
<b>Possibility of hazardous reactions</b>	None known.
<b>Conditions to avoid</b>	None known.
<b>Materials to avoid</b>	None known.
<b>Hazardous decomposition products</b>	None known.

### 11. Toxicological information

#### Information on toxicological effects

**Toxicological effects** Please read Section 2 thoroughly to understand the toxicological risks, (if any) and precautions for safe use (if any).

#### Skin corrosion/irritation

#### Skin sensitization

**Skin sensitization** Based on available data the classification criteria are not met.

**Eye contact** May cause temporary eye irritation.

### 12. Ecological Information

**Ecotoxicity** Please read Section 2 completely. If any environmental warnings such as; H411 or H412 are listed in Section 2, please use appropriate procedures when disposing of product and container. Do not put materials into waterways or sewers.

#### Toxicity

**Toxicity** Please read Section 2 completely. If any environmental warnings such as; H411 or H412 are listed in Section 2, please use appropriate procedures when disposing of product and container. Do not put materials into waterways or sewers.

#### Persistence and degradability

**Persistence and degradability** No data available.

**Biodegradation** Not inherently biodegradable.

#### Bioaccumulative potential

**Partition coefficient** No information available.

#### Mobility in soil

**Mobility** Semi-mobile.

#### Results of PBT and vPvB assessment



## CTL 35 NUTMEG

**Results of PBT and vPvB assessment** This product does not contain any substances classified as PBT or vPvB.

### Other adverse effects

**Other adverse effects** None known.

## 13. Disposal considerations

### Waste treatment methods

**General information** Dispose of waste product or used containers in accordance with local regulations. When handling waste, the safety precautions applying to handling of the product should be considered.

## 14. Transport information

**General** The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, DoT).

### UN Number

Not applicable.

### UN proper shipping name

Not applicable.

### Transport hazard class(es)

No transport warning sign required.

### Packing group

Not applicable.

### Environmental hazards

#### **Environmentally Hazardous Substance**

Please refer to Section 2 for any environmental hazards associated with this product. If H411/H412 warnings are shown then please verify packaging and labeling requirements for larger volumes.

### Special precautions for user

Not applicable.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not applicable.

## 15. Regulatory information

### International Regulations

#### US State Regulations

##### **California Proposition 65 Carcinogens and Reproductive Toxins**

None of the ingredients are listed or exempt.

##### **Massachusetts "Right To Know" List**

*Hydrous Aluminium Silicate*

1-5%

*2-aminoethanol*

<1%

**CTL 35 NUTMEG**

*red iron oxide*

1-5%

**Rhode Island "Right To Know" List**

*Hydrous Aluminium Silicate*

1-5%

*2-aminoethanol*

<1%

*red iron oxide*

1-5%

**Minnesota "Right To Know" List**

*Hydrous Aluminium Silicate*

1-5%

*2-aminoethanol*

<1%

*red iron oxide*

1-5%

**New Jersey "Right To Know" List**

*Hydrous Aluminium Silicate*

1-5%

*2-aminoethanol*

<1%

*red iron oxide*

1-5%

*manganese dioxide*

<1%

**Pennsylvania "Right To Know" List**

*Hydrous Aluminium Silicate*

1-5%

*2-aminoethanol*

<1%

*red iron oxide*

1-5%

**Inventories****Canada - DSL/NDSL**

All the ingredients are listed or exempt.

**US - TSCA**

All the ingredients are listed or exempt.

**US - TSCA 12(b) Export Notification**

All the ingredients are listed or exempt.

**16. Other information**

## CTL 35 NUTMEG

<b>General information</b>	The following are the top 5 materials by weight listed for New Jersey (if applicable):- Water 7732-18-5, Non Lead Frit65997-18-4, Hydrated Aluminum Silicate1332-58-7, Calcium Silicate 13983-17-0 Various Pigments
<b>Revision date</b>	7/28/2016
<b>Revision</b>	3
<b>Supersedes date</b>	7/27/2016
<b>SDS No.</b>	4994

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.

## **SAFETY DATA SHEET**

### **CRYSTALTEX GLAZES (LEAD FREE) – CTL SERIES (1)**

Mfg. American Art & Clay Co.

SDS's for the following Glazes:

CTL 1 JET MOSS

CTL 3 LAVA

CTL 9 SNAP DRAGON

CTL 10 PEPPERMINT ICE

CTL 11 SNOW FIRE

CTL 15 MOON SCAPE

CTL 31 BROWN EARTH

CTL 32 CHOCOLATE CHIP

CTL 36 GINGER BREAD

CTL 41 MELON

CTL 42 FANTASIA

CTL 43 AURORA

CTL 61 BUTTERCUP

## SAFETY DATA SHEET

### CTL 1 JET MOSS

#### 1. Identification

##### Product identifier

Product name CTL 1 JET MOSS

Product number CTL 1 JET MOSS

##### Recommended use of the chemical and restrictions on use

Application ceramic glaze

##### Details of the supplier of the safety data sheet

Supplier American Art Clay Co Inc  
6060 Guion Road  
Indianapolis,  
IN 46254-1222  
USA  
Toll Free: 1-800-925-5195 ext. 1303  
Local: 1-317-243-0066 ext. 1303

##### Emergency telephone number

Emergency telephone 1 317 243 0066 ext. 1303 Mon-Fri, 0900-1700 EST

#### 2. Hazard(s) identification

##### Classification of the substance or mixture

Physical hazards Not Classified

Health hazards Not Classified

Environmental hazards Not Classified

##### Label elements

Hazard statements NC Not Classified

##### Other hazards

none present

#### 3. Composition/information on ingredients

##### Mixtures

Composition comments Only ingredients listed above are notifiable for this product. If none are shown then all ingredients are exempt.

#### 4. First-aid measures

##### Description of first aid measures

##### General information

--

**Ingestion** Do not induce vomiting. Rinse mouth thoroughly with water. Give a few small glasses of water or milk to drink. Get medical attention if any discomfort continues.

**Skin Contact** Wash skin thoroughly with soap and water.

**Eye contact** Rinse with water.

##### Most important symptoms and effects, both acute and delayed

## CTL 1 JET MOSS

<b>Inhalation</b>	Read Section 2 for any specific precautions associated with this product. In general, breathing any type of dust / mist can and may aggravate irritation of the throat and lungs.
<b>Ingestion</b>	Read Section 2 for any specific precautions associated with the use of this product. Products with specific warnings about ingestion will give guidance there.
<b>Skin contact</b>	Read Section 2 for any specific precautions associated with the use of this product. In general most ceramic glazes, clays and special products will tend to have a drying effect on the skin and may cause some sensitivity to users with sensitive skin.
<b>Eye contact</b>	Read Section 2 for any specific precautions associated with the use of this product. In general most ceramic and special products contain materials that maybe abrasive to eyes. Keeping materials from contacting the eyes is prudent. If contact does occur, flush with clean water, do not rub.

### Indication of immediate medical attention and special treatment needed

**Notes for the doctor**                      Treat symptomatically.

### 5. Fire-fighting measures

#### Extinguishing media

**Suitable extinguishing media**      Use fire-extinguishing media suitable for the surrounding fire.

#### Special hazards arising from the substance or mixture

**Specific hazards**                        The product is not believed to present a hazard due to its physical nature.

#### Advice for firefighters

**Special protective equipment for firefighters**      Use protective equipment appropriate for surrounding materials.

### 6. Accidental release measures

#### Personal precautions, protective equipment and emergency procedures

**Personal precautions**                      For personal protection, see Section 8.

#### Environmental precautions

**Environmental precautions**              Please read Section 2 completely. If any environmental warnings such as; H411 or H412 are listed in Section 2, please use appropriate procedures when disposing of product and container. Do not put materials into waterways or sewers.

#### Methods and material for containment and cleaning up

**Methods for cleaning up**                      Collect spillage for reclamation or absorb in vermiculite, dry sand or similar material

**Reference to other sections**              For waste disposal, see Section 13. For personal protection, see Section 8.

### 7. Handling and storage

#### Precautions for safe handling

**Usage precautions**                        Read label before use. Do not eat, drink or smoke when using this product. Good personal hygiene procedures should be implemented. Wash hands and any other contaminated areas of the body with soap and water before leaving the work site.

#### Conditions for safe storage, including any incompatibilities

**Storage precautions**                        Store in tightly-closed, original container in a dry and cool place.

#### Specific end uses(s)

**Specific end use(s)**                        The identified uses for this product are detailed in Section 1.2.

## CTL 1 JET MOSS

### 8. Exposure Controls/personal protection

#### Control parameters

**Ingredient comments** Only ingredients listed in Section 3 are notifiable for this product. If none are shown then all ingredients are exempt.

#### Exposure controls

**Appropriate engineering controls** No specific ventilation requirements unless the "FAN" pictogram is shown above or specified in Section 2.

**Eye/face protection** No specific eye protection required unless the "EYE PROTECTION" pictogram is shown above or specified in Section 2.

**Hand protection** No specific hand protection required unless the "HAND PROTECTION" pictogram is shown above or specified in Section 2.

**Hygiene measures** Using good personal hygiene practices is always appropriate. Keeping a clean work space, cleaning up properly when done, and not eating, drinking or smoking when using this product.

**Respiratory protection** No specific respiratory protection required unless the "RESPIRATOR" pictogram is shown above or specified in Section 2. Using the appropriate certified protection for the operation is important if required.

### 9. Physical and Chemical Properties

#### Information on basic physical and chemical properties

<b>Appearance</b>	Colored liquid.
<b>Color</b>	Various colors.
<b>Odor</b>	Almost odorless.
<b>Odor threshold</b>	No information available.
<b>pH</b>	6-8
<b>Melting point</b>	No information available.
<b>Initial boiling point and range</b>	No information available.
<b>Flash point</b>	No information available.
<b>Evaporation rate</b>	No information available.
<b>Flammability (solid, gas)</b>	No information available.
<b>Upper/lower flammability or explosive limits</b>	No information available.
<b>Vapor pressure</b>	No information available.
<b>Relative density</b>	Greater than 1.0
<b>Solubility(ies)</b>	Not applicable.
<b>Partition coefficient</b>	No information available.
<b>Auto-ignition temperature</b>	Not applicable.
<b>Decomposition Temperature</b>	No information available.
<b>Viscosity</b>	No information available.
<b>Explosive properties</b>	none

**CTL 1 JET MOSS**

**Oxidizing properties** none

**Other information** Not applicable.

**10. Stability and reactivity**

**Reactivity** There are no known reactivity hazards associated with this product.

**Stability** No particular stability concerns.

**Possibility of hazardous reactions** None known.

**Conditions to avoid** None known.

**Materials to avoid** None known.

**Hazardous decomposition products** None known.

**11. Toxicological information****Information on toxicological effects**

**Toxicological effects** Please read Section 2 thoroughly to understand the toxicological risks, (if any) and precautions for safe use (if any).

**Skin corrosion/irritation****Skin sensitization**

**Skin sensitization** Based on available data the classification criteria are not met.

**Eye contact** May cause temporary eye irritation.

**12. Ecological Information**

**Ecotoxicity** Please read Section 2 completely. If any environmental warnings such as; H411 or H412 are listed in Section 2, please use appropriate procedures when disposing of product and container. Do not put materials into waterways or sewers.

**Toxicity**

**Toxicity** Please read Section 2 completely. If any environmental warnings such as; H411 or H412 are listed in Section 2, please use appropriate procedures when disposing of product and container. Do not put materials into waterways or sewers.

**Persistence and degradability**

**Persistence and degradability** No data available.

**Biodegradation** Not inherently biodegradable.

**Bioaccumulative potential**

**Partition coefficient** No information available.

**Mobility in soil**

**Mobility** Semi-mobile.

**Results of PBT and vPvB assessment**



## CTL 1 JET MOSS

**Results of PBT and vPvB assessment** This product does not contain any substances classified as PBT or vPvB.

**Other adverse effects**

**Other adverse effects** None known.

### 13. Disposal considerations

**Waste treatment methods**

**General information** Dispose of waste product or used containers in accordance with local regulations. When handling waste, the safety precautions applying to handling of the product should be considered.

### 14. Transport Information

**General** The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, DoT).

**UN Number**

Not applicable.

**UN proper shipping name**

Not applicable.

**Transport hazard class(es)**

No transport warning sign required.

**Packing group**

Not applicable.

**Environmental hazards**

**Environmentally Hazardous Substance**

Please refer to Section 2 for any environmental hazards associated with this product. If H411/H412 warnings are shown then please verify packaging and labeling requirements for larger volumes.

**Special precautions for user**

Not applicable.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not applicable.

### 15. Regulatory information

**International Regulations**

**US State Regulations**

**California Proposition 65 Carcinogens and Reproductive Toxins**  
None of the ingredients are listed or exempt.

**California Directors List of Hazardous Substances**

*2-aminoethanol*  
<1%

**Massachusetts "Right To Know" List**

## CTL 1 JET MOSS

*Hydrated Aluminium Silicate*

1-5%

*2-aminoethanol*

<1%

*silica*

1-5%

### **Rhode Island "Right To Know" List**

*Hydrated Aluminium Silicate*

1-5%

*2-aminoethanol*

<1%

*silica*

1-5%

### **Minnesota "Right To Know" List**

*Hydrated Aluminium Silicate*

1-5%

*2-aminoethanol*

<1%

*silica*

1-5%

### **New Jersey "Right To Know" List**

*Hydrated Aluminium Silicate*

1-5%

*2-aminoethanol*

<1%

*silica*

1-5%

### **Pennsylvania "Right To Know" List**

*Hydrated Aluminium Silicate*

*2-aminoethanol*

*silica*

### **Inventories**

#### **Canada - DSL/NDSL**

All the ingredients are listed or exempt.

#### **US - TSCA**

All the ingredients are listed or exempt.

#### **US - TSCA 12(b) Export Notification**

All the ingredients are listed or exempt.

<b>16. Other information</b>
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## CTL 1 JET MOSS

**General information**

The following are the top 5 materials by weight listed for New Jersey (if applicable):- Water  
7732-18-5, Non Lead Frit65997-18-4, Hydrated Aluminum Silicate1332-58-7, Calcium Silicate  
13983-17-0  
Various Pigments

**Revision date**

7/28/2016

**Revision**

3

**Supersedes date**

7/27/2016

**SDS No.**

4980

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.

## SAFETY DATA SHEET

### CTL 3 LAVA

#### 1. Identification

##### Product identifier

Product name CTL 3 LAVA

Product number CTL 3 LAVA

##### Recommended use of the chemical and restrictions on use

Application ceramic glaze

##### Details of the supplier of the safety data sheet

Supplier American Art Clay Co Inc  
6060 Guion Road  
Indianapolis,  
IN 46254-1222  
USA  
Toll Free: 1-800-925-5195 ext. 1303  
Local: 1-317-243-0066 ext. 1303

##### Emergency telephone number

Emergency telephone 1 317 243 0066 ext. 1303 Mon-Fri, 0900-1700 EST

#### 2. Hazard(s) identification

##### Classification of the substance or mixture

Physical hazards Not Classified

Health hazards Not Classified

##### Label elements

Hazard statements NC Not Classified

##### Other hazards

none present

#### 3. Composition/information on ingredients

##### Mixtures

Composition comments Only ingredients listed above are notifiable for this product. If none are shown then all ingredients are exempt.

#### 4. First-aid measures

##### Description of first aid measures

General information --

Ingestion Do not induce vomiting. Rinse mouth thoroughly with water. Give a few small glasses of water or milk to drink. Get medical attention if any discomfort continues.

Skin Contact Wash skin thoroughly with soap and water.

Eye contact Rinse with water.

##### Most important symptoms and effects, both acute and delayed

Inhalation Read Section 2 for any specific precautions associated with this product. In general, breathing any type of dust / mist can and may aggravate irritation of the throat and lungs.

## CTL 3 LAVA

<b>Ingestion</b>	Read Section 2 for any specific precautions associated with the use of this product. Products with specific warnings about ingestion will give guidance there.
<b>Skin contact</b>	Read Section 2 for any specific precautions associated with the use of this product. In general most ceramic glazes, clays and special products will tend to have a drying effect on the skin and may cause some sensitivity to users with sensitive skin.
<b>Eye contact</b>	Read Section 2 for any specific precautions associated with the use of this product. In general most ceramic and special products contain materials that maybe abrasive to eyes. Keeping materials from contacting the eyes is prudent. If contact does occur, flush with clean water, do not rub.

### Indication of immediate medical attention and special treatment needed

**Notes for the doctor** Treat symptomatically.

### 5. Fire-fighting measures

#### Extinguishing media

**Suitable extinguishing media** Use fire-extinguishing media suitable for the surrounding fire.

#### Special hazards arising from the substance or mixture

**Specific hazards** The product is not believed to present a hazard due to its physical nature.

#### Advice for firefighters

**Special protective equipment for firefighters** Use protective equipment appropriate for surrounding materials.

### 6. Accidental release measures

#### Personal precautions, protective equipment and emergency procedures

**Personal precautions** For personal protection, see Section 8.

#### Environmental precautions

**Environmental precautions** Please read Section 2 completely. If any environmental warnings such as; H411 or H412 are listed in Section 2, please use appropriate procedures when disposing of product and container. Do not put materials into waterways or sewers.

#### Methods and material for containment and cleaning up

**Methods for cleaning up** Collect spillage for reclamation or absorb in vermiculite, dry sand or similar material

**Reference to other sections** For waste disposal, see Section 13. For personal protection, see Section 8.

### 7. Handling and storage

#### Precautions for safe handling

**Usage precautions** Read label before use. Do not eat, drink or smoke when using this product. Good personal hygiene procedures should be implemented. Wash hands and any other contaminated areas of the body with soap and water before leaving the work site.

#### Conditions for safe storage, including any incompatibilities

**Storage precautions** Store in tightly-closed, original container in a dry and cool place.

#### Specific end uses(s)

**Specific end use(s)** The identified uses for this product are detailed in Section 1.2.

### 8. Exposure Controls/personal protection

## CTL 3 LAVA

### Control parameters

**Ingredient comments** Only ingredients listed in Section 3 are notifiable for this product. If none are shown then all ingredients are exempt.

### Exposure controls

**Appropriate engineering controls** No specific ventilation requirements unless the "FAN" pictogram is shown above or specified in Section 2.

**Eye/face protection** No specific eye protection required unless the "EYE PROTECTION" pictogram is shown above or specified in Section 2.

**Hand protection** No specific hand protection required unless the "HAND PROTECTION" pictogram is shown above or specified in Section 2.

**Hygiene measures** Using good personal hygiene practices is always appropriate. Keeping a clean work space, cleaning up properly when done, and not eating, drinking or smoking when using this product.

**Respiratory protection** No specific respiratory protection required unless the "RESPIRATOR" pictogram is shown above or specified in Section 2. Using the appropriate certified protection for the operation is important if required.

## 9. Physical and Chemical Properties

### Information on basic physical and chemical properties

<b>Appearance</b>	Colored liquid.
<b>Color</b>	Various colors.
<b>Odor</b>	Almost odorless.
<b>Odor threshold</b>	No information available.
<b>pH</b>	6-8
<b>Melting point</b>	No information available.
<b>Initial boiling point and range</b>	No information available.
<b>Flash point</b>	No information available.
<b>Evaporation rate</b>	No information available.
<b>Flammability (solid, gas)</b>	No information available.
<b>Upper/lower flammability or explosive limits</b>	No information available.
<b>Vapor pressure</b>	No information available.
<b>Relative density</b>	Greater than 1.0
<b>Solubility(ies)</b>	Not applicable.
<b>Partition coefficient</b>	No information available.
<b>Auto-ignition temperature</b>	Not applicable.
<b>Decomposition Temperature</b>	No information available.
<b>Viscosity</b>	No information available.
<b>Explosive properties</b>	none
<b>Oxidizing properties</b>	none

## CTL 3 LAVA

**Other information** Not applicable.

### 10. Stability and reactivity

<b>Reactivity</b>	There are no known reactivity hazards associated with this product.
<b>Stability</b>	No particular stability concerns.
<b>Possibility of hazardous reactions</b>	None known.
<b>Conditions to avoid</b>	None known.
<b>Materials to avoid</b>	None known.
<b>Hazardous decomposition products</b>	None known.

### 11. Toxicological information

#### Information on toxicological effects

**Toxicological effects** Please read Section 2 thoroughly to understand the toxicological risks, (if any) and precautions for safe use (if any).

#### Skin corrosion/irritation

#### Skin sensitization

**Skin sensitization** Based on available data the classification criteria are not met.

**Eye contact** May cause temporary eye irritation.

### 12. Ecological Information

**Ecotoxicity** Please read Section 2 completely. If any environmental warnings such as; H411 or H412 are listed in Section 2, please use appropriate procedures when disposing of product and container. Do not put materials into waterways or sewers.

#### Toxicity

**Toxicity** Please read Section 2 completely. If any environmental warnings such as; H411 or H412 are listed in Section 2, please use appropriate procedures when disposing of product and container. Do not put materials into waterways or sewers.

#### Persistence and degradability

**Persistence and degradability** No data available.

**Biodegradation** Not inherently biodegradable.

#### Bioaccumulative potential

**Partition coefficient** No information available.

#### Mobility in soil

**Mobility** Semi-mobile.

#### Results of PBT and vPvB assessment

**Results of PBT and vPvB assessment** This product does not contain any substances classified as PBT or vPvB.

## CTL 3 LAVA

### Other adverse effects

Other adverse effects None known.

### 13. Disposal considerations

#### Waste treatment methods

**General information** Dispose of waste product or used containers in accordance with local regulations. When handling waste, the safety precautions applying to handling of the product should be considered.

### 14. Transport information

**General** The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, DoT).

#### UN Number

Not applicable.

#### UN proper shipping name

Not applicable.

#### Transport hazard class(es)

No transport warning sign required.

#### Packing group

Not applicable.

#### Environmental hazards

##### **Environmentally Hazardous Substance**

Please refer to Section 2 for any environmental hazards associated with this product. If H411/H412 warnings are shown then please verify packaging and labeling requirements for larger volumes.

#### Special precautions for user

Not applicable.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not applicable.

### 15. Regulatory information

#### International Regulations

#### US State Regulations

##### **California Proposition 65 Carcinogens and Reproductive Toxins**

None of the ingredients are listed or exempt.

##### **Massachusetts "Right To Know" List**

*zinc oxide*

1-5%

*2-aminoethanol*

<1%

*aluminium oxide*

1-5%



## CTL 3 LAVA

*Hydrated Aluminium Silicate*

1-5%

### **Rhode Island "Right To Know" List**

*zinc oxide*

1-5%

*2-aminoethanol*

<1%

*aluminium oxide*

1-5%

*Hydrated Aluminium Silicate*

1-5%

### **Minnesota "Right To Know" List**

*zinc oxide*

*2-aminoethanol*

*aluminium oxide*

*Hydrated Aluminium Silicate*

### **New Jersey "Right To Know" List**

*zinc oxide*

1-5%

*2-aminoethanol*

<1%

*aluminium oxide*

1-5%

*Hydrated Aluminium Silicate*

1-5%

### **Pennsylvania "Right To Know" List**

*zinc oxide*

1-5%

*2-aminoethanol*

<1%

*aluminium oxide*

1-5%

*Hydrated Aluminium Silicate*

1-5%

### **Inventories**

#### **Canada - DSL/NDSL**

All the ingredients are listed or exempt.

#### **US - TSCA**

All the ingredients are listed or exempt.

#### **US - TSCA 12(b) Export Notification**

All the ingredients are listed or exempt.

**CTL 3 LAVA****16. Other information**

<b>General information</b>	The following are the top 5 materials by weight listed for New Jersey (if applicable):- Water 7732-18-5, Non Lead Frit65997-18-4, Hydrated Aluminum Silicate1332-58-7, Calcium Silicate 13983-17-0 Various Pigments
<b>Revision date</b>	7/28/2016
<b>Revision</b>	3
<b>Supersedes date</b>	7/27/2016
<b>SDS No.</b>	4989

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.

## SAFETY DATA SHEET

### CTL 9 SNAP DRAGON

#### 1. Identification

##### Product identifier

Product name CTL 9 SNAP DRAGON

Product number CTL 9 SNAP DRAGON

##### Recommended use of the chemical and restrictions on use

Application ceramic glaze

##### Details of the supplier of the safety data sheet

Supplier American Art Clay Co Inc  
6060 Guion Road  
Indianapolis,  
IN 46254-1222  
USA  
Toll Free: 1-800-925-5195 ext. 1303  
Local: 1-317-243-0066 ext. 1303

##### Emergency telephone number

Emergency telephone 1 317 243 0066 ext. 1303 Mon-Fri, 0900-1700 EST

#### 2. Hazard(s) identification

##### Classification of the substance or mixture

Physical hazards Not Classified

Health hazards Not Classified

##### Label elements

Hazard statements NC Not Classified

##### Other hazards

none present

#### 3. Composition/information on ingredients

##### Mixtures

Composition comments Only ingredients listed above are notifiable for this product. If none are shown then all ingredients are exempt.

#### 4. First-aid measures

##### Description of first aid measures

##### General information

--

##### Ingestion

Do not induce vomiting. Rinse mouth thoroughly with water. Give a few small glasses of water or milk to drink. Get medical attention if any discomfort continues.

##### Skin Contact

Wash skin thoroughly with soap and water.

##### Eye contact

Rinse with water.

##### Most important symptoms and effects, both acute and delayed

##### Inhalation

Read Section 2 for any specific precautions associated with this product. In general, breathing any type of dust / mist can and may aggravate irritation of the throat and lungs.

## CTL 9 SNAP DRAGON

<b>Ingestion</b>	Read Section 2 for any specific precautions associated with the use of this product. Products with specific warnings about ingestion will give guidance there.
<b>Skin contact</b>	Read Section 2 for any specific precautions associated with the use of this product. In general most ceramic glazes, clays and special products will tend to have a drying effect on the skin and may cause some sensitivity to users with sensitive skin.
<b>Eye contact</b>	Read Section 2 for any specific precautions associated with the use of this product. In general most ceramic and special products contain materials that maybe abrasive to eyes. Keeping materials from contacting the eyes is prudent. If contact does occur, flush with clean water, do not rub.

### Indication of immediate medical attention and special treatment needed

**Notes for the doctor**            Treat symptomatically.

### 5. Fire-fighting measures

#### Extinguishing media

**Suitable extinguishing media**    Use fire-extinguishing media suitable for the surrounding fire.

#### Special hazards arising from the substance or mixture

**Specific hazards**                The product is not believed to present a hazard due to its physical nature.

#### Advice for firefighters

**Special protective equipment for firefighters**    Use protective equipment appropriate for surrounding materials.

### 6. Accidental release measures

#### Personal precautions, protective equipment and emergency procedures

**Personal precautions**            For personal protection, see Section 8.

#### Environmental precautions

**Environmental precautions**    Please read Section 2 completely. If any environmental warnings such as; H411 or H412 are listed in Section 2, please use appropriate procedures when disposing of product and container. Do not put materials into waterways or sewers.

#### Methods and material for containment and cleaning up

**Methods for cleaning up**        Collect spillage for reclamation or absorb in vermiculite, dry sand or similar material

**Reference to other sections**    For waste disposal, see Section 13. For personal protection, see Section 8.

### 7. Handling and storage

#### Precautions for safe handling

**Usage precautions**                Read label before use. Do not eat, drink or smoke when using this product. Good personal hygiene procedures should be implemented. Wash hands and any other contaminated areas of the body with soap and water before leaving the work site.

#### Conditions for safe storage, including any incompatibilities

**Storage precautions**            Store in tightly-closed, original container in a dry and cool place.

#### Specific end uses(s)

**Specific end use(s)**                The identified uses for this product are detailed in Section 1.2.

### 8. Exposure Controls/personal protection

## CTL 9 SNAP DRAGON

### Control parameters

**Ingredient comments** Only ingredients listed in Section 3 are notifiable for this product. If none are shown then all ingredients are exempt.

### Exposure controls

**Appropriate engineering controls** No specific ventilation requirements unless the "FAN" pictogram is shown above or specified in Section 2.

**Eye/face protection** No specific eye protection required unless the "EYE PROTECTION" pictogram is shown above or specified in Section 2.

**Hand protection** No specific hand protection required unless the "HAND PROTECTION" pictogram is shown above or specified in Section 2.

**Hygiene measures** Using good personal hygiene practices is always appropriate. Keeping a clean work space, cleaning up properly when done, and not eating, drinking or smoking when using this product.

**Respiratory protection** No specific respiratory protection required unless the "RESPIRATOR" pictogram is shown above or specified in Section 2. Using the appropriate certified protection for the operation is important if required.

## 9. Physical and Chemical Properties

### Information on basic physical and chemical properties

<b>Appearance</b>	Colored liquid.
<b>Color</b>	Various colors.
<b>Odor</b>	Almost odorless.
<b>Odor threshold</b>	No information available.
<b>pH</b>	6-8
<b>Melting point</b>	No information available.
<b>Initial boiling point and range</b>	No information available.
<b>Flash point</b>	No information available.
<b>Evaporation rate</b>	No information available.
<b>Flammability (solid, gas)</b>	No information available.
<b>Upper/lower flammability or explosive limits</b>	No information available.
<b>Vapor pressure</b>	No information available.
<b>Relative density</b>	Greater than 1.0
<b>Solubility(ies)</b>	Not applicable.
<b>Partition coefficient</b>	No information available.
<b>Auto-ignition temperature</b>	Not applicable.
<b>Decomposition Temperature</b>	No information available.
<b>Viscosity</b>	No information available.
<b>Explosive properties</b>	none
<b>Oxidizing properties</b>	none

## CTL 9 SNAP DRAGON

**Other information** Not applicable.

### 10. Stability and reactivity

**Reactivity** There are no known reactivity hazards associated with this product.

**Stability** No particular stability concerns.

**Possibility of hazardous reactions** None known.

**Conditions to avoid** None known.

**Materials to avoid** None known.

**Hazardous decomposition products** None known.

### 11. Toxicological information

#### Information on toxicological effects

**Toxicological effects** Please read Section 2 thoroughly to understand the toxicological risks, (if any) and precautions for safe use (if any).

#### Skin corrosion/irritation

#### Skin sensitization

**Skin sensitization** Based on available data the classification criteria are not met.

**Eye contact** May cause temporary eye irritation.

### 12. Ecological information

**Ecotoxicity** Please read Section 2 completely. If any environmental warnings such as; H411 or H412 are listed in Section 2, please use appropriate procedures when disposing of product and container. Do not put materials into waterways or sewers.

#### Toxicity

**Toxicity** Please read Section 2 completely. If any environmental warnings such as; H411 or H412 are listed in Section 2, please use appropriate procedures when disposing of product and container. Do not put materials into waterways or sewers.

#### Persistence and degradability

**Persistence and degradability** No data available.

**Biodegradation** Not inherently biodegradable.

#### Bioaccumulative potential

**Partition coefficient** No information available.

#### Mobility in soil

**Mobility** Semi-mobile.

#### Results of PBT and vPvB assessment

**Results of PBT and vPvB assessment** This product does not contain any substances classified as PBT or vPvB.

## CTL 9 SNAP DRAGON

### Other adverse effects

Other adverse effects           None known.

### 13. Disposal considerations

#### Waste treatment methods

**General information**           Dispose of waste product or used containers in accordance with local regulations. When handling waste, the safety precautions applying to handling of the product should be considered.

### 14. Transport information

**General**                       The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, DoT).

#### UN Number

Not applicable.

#### UN proper shipping name

Not applicable.

#### Transport hazard class(es)

No transport warning sign required.

#### Packing group

Not applicable.

#### Environmental hazards

##### **Environmentally Hazardous Substance**

Please refer to Section 2 for any environmental hazards associated with this product. If H411/H412 warnings are shown then please verify packaging and labeling requirements for larger volumes.

#### Special precautions for user

Not applicable.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**   Not applicable.

### 15. Regulatory information

#### International Regulations

#### US State Regulations

**California Proposition 65 Carcinogens and Reproductive Toxins**  
None of the ingredients are listed or exempt.

#### **Massachusetts "Right To Know" List**

*Hydrated Aluminium Silicate*  
5-10%

*silica*  
1-5%

*zinc oxide*  
1-5%

## CTL 9 SNAP DRAGON

*2-aminoethanol*

<1%

### **Rhode Island "Right To Know" List**

*Hydrated Aluminium Silicate*

5-10%

*silica*

1-5%

*zinc oxide*

1-5%

*2-aminoethanol*

<1%

### **Minnesota "Right To Know" List**

*Hydrated Aluminium Silicate*

5-10%

*silica*

1-5%

*zinc oxide*

1-5%

*2-aminoethanol*

<1%

### **New Jersey "Right To Know" List**

*Hydrated Aluminium Silicate*

5-10%

*silica*

1-5%

*zinc oxide*

1-5%

*2-aminoethanol*

<1%

### **Pennsylvania "Right To Know" List**

*Hydrated Aluminium Silicate*

5-10%

*silica*

1-5%

*zinc oxide*

1-5%

*2-aminoethanol*

<1%

### **Inventories**

#### **Canada - DSL/NDL**

All the ingredients are listed or exempt.



**CTL 9 SNAP DRAGON****US - TSCA**

All the ingredients are listed or exempt.

**US - TSCA 12(b) Export Notification**

All the ingredients are listed or exempt.

**16. Other information**

<b>General information</b>	The following are the top 5 materials by weight listed for New Jersey (if applicable):- Water 7732-18-5, Non Lead Frit65997-18-4, Hydrated Aluminum Silicate1332-58-7, Calcium Silicate 13983-17-0 Various Pigments
<b>Revision date</b>	7/28/2016
<b>Revision</b>	3
<b>Supersedes date</b>	7/27/2016
<b>SDS No.</b>	5015

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.

## SAFETY DATA SHEET

### CTL 10 PEPPERMINT ICE

#### 1. Identification

##### Product identifier

**Product name** CTL 10 PEPPERMINT ICE

**Product number** CTL 10 PEPPERMINT ICE

##### Recommended use of the chemical and restrictions on use

**Application** ceramic glaze

##### Details of the supplier of the safety data sheet

**Supplier** American Art Clay Co Inc  
6060 Guion Road  
Indianapolis,  
IN 46254-1222  
USA  
Toll Free: 1-800-925-5195 ext. 1303  
Local: 1-317-243-0066 ext. 1303

##### Emergency telephone number

**Emergency telephone** 1 317 243 0066 ext. 1303 Mon-Fri, 0900-1700 EST

#### 2. Hazard(s) identification

##### Classification of the substance or mixture

**Physical hazards** Not Classified

**Health hazards** Not Classified

##### Label elements

**Hazard statements** NC Not Classified

##### Other hazards

none present

#### 3. Composition/information on ingredients

##### Mixtures

**Composition comments** Only ingredients listed above are notifiable for this product. If none are shown then all ingredients are exempt.

#### 4. First-aid measures

##### Description of first aid measures

**General information** --

**Ingestion** Do not induce vomiting. Rinse mouth thoroughly with water. Give a few small glasses of water or milk to drink. Get medical attention if any discomfort continues.

**Skin Contact** Wash skin thoroughly with soap and water.

**Eye contact** Rinse with water.

##### Most important symptoms and effects, both acute and delayed

**Inhalation** Read Section 2 for any specific precautions associated with this product. In general, breathing any type of dust / mist can and may aggravate irritation of the throat and lungs.

## CTL 10 PEPPERMINT ICE

<b>Ingestion</b>	Read Section 2 for any specific precautions associated with the use of this product. Products with specific warnings about ingestion will give guidance there.
<b>Skin contact</b>	Read Section 2 for any specific precautions associated with the use of this product. In general most ceramic glazes, clays and special products will tend to have a drying effect on the skin and may cause some sensitivity to users with sensitive skin.
<b>Eye contact</b>	Read Section 2 for any specific precautions associated with the use of this product. In general most ceramic and special products contain materials that maybe abrasive to eyes. Keeping materials from contacting the eyes is prudent. If contact does occur, flush with clean water, do not rub.

### Indication of immediate medical attention and special treatment needed

**Notes for the doctor**            Treat symptomatically.

### 5. Fire-fighting measures

#### Extinguishing media

**Suitable extinguishing media**    Use fire-extinguishing media suitable for the surrounding fire.

#### Special hazards arising from the substance or mixture

**Specific hazards**                The product is not believed to present a hazard due to its physical nature.

#### Advice for firefighters

**Special protective equipment for firefighters**    Use protective equipment appropriate for surrounding materials.

### 6. Accidental release measures

#### Personal precautions, protective equipment and emergency procedures

**Personal precautions**            For personal protection, see Section 8.

#### Environmental precautions

**Environmental precautions**    Please read Section 2 completely. If any environmental warnings such as; H411 or H412 are listed in Section 2, please use appropriate procedures when disposing of product and container. Do not put materials into waterways or sewers.

#### Methods and material for containment and cleaning up

**Methods for cleaning up**        Collect spillage for reclamation or absorb in vermiculite, dry sand or similar material

**Reference to other sections**    For waste disposal, see Section 13. For personal protection, see Section 8.

### 7. Handling and storage

#### Precautions for safe handling

**Usage precautions**                Read label before use. Do not eat, drink or smoke when using this product. Good personal hygiene procedures should be implemented. Wash hands and any other contaminated areas of the body with soap and water before leaving the work site.

#### Conditions for safe storage, including any incompatibilities

**Storage precautions**            Store in tightly-closed, original container in a dry and cool place.

#### Specific end uses(s)

**Specific end use(s)**                The identified uses for this product are detailed in Section 1.2.

### 8. Exposure Controls/personal protection

## CTL 10 PEPPERMINT ICE

### Control parameters

**Ingredient comments** Only ingredients listed in Section 3 are notifiable for this product. If none are shown then all ingredients are exempt.

### Exposure controls

**Appropriate engineering controls** No specific ventilation requirements unless the "FAN" pictogram is shown above or specified in Section 2.

**Eye/face protection** No specific eye protection required unless the "EYE PROTECTION" pictogram is shown above or specified in Section 2.

**Hand protection** No specific hand protection required unless the "HAND PROTECTION" pictogram is shown above or specified in Section 2.

**Hygiene measures** Using good personal hygiene practices is always appropriate. Keeping a clean work space, cleaning up properly when done, and not eating, drinking or smoking when using this product.

**Respiratory protection** No specific respiratory protection required unless the "RESPIRATOR" pictogram is shown above or specified in Section 2. Using the appropriate certified protection for the operation is important if required.

### 9. Physical and Chemical Properties

#### Information on basic physical and chemical properties

<b>Appearance</b>	Colored liquid.
<b>Color</b>	Various colors.
<b>Odor</b>	Almost odorless.
<b>Odor threshold</b>	No information available.
<b>pH</b>	6-8
<b>Melting point</b>	No information available.
<b>Initial boiling point and range</b>	No information available.
<b>Flash point</b>	No information available.
<b>Evaporation rate</b>	No information available.
<b>Flammability (solid, gas)</b>	No information available.
<b>Upper/lower flammability or explosive limits</b>	No information available.
<b>Vapor pressure</b>	No information available.
<b>Relative density</b>	Greater than 1.0
<b>Solubility(ies)</b>	Not applicable.
<b>Partition coefficient</b>	No information available.
<b>Auto-ignition temperature</b>	Not applicable.
<b>Decomposition Temperature</b>	No information available.
<b>Viscosity</b>	No information available.
<b>Explosive properties</b>	none
<b>Oxidizing properties</b>	none

## CTL 10 PEPPERMINT ICE

**Other information** Not applicable.

### 10. Stability and reactivity

**Reactivity** There are no known reactivity hazards associated with this product.

**Stability** No particular stability concerns.

**Possibility of hazardous reactions** None known.

**Conditions to avoid** None known.

**Materials to avoid** None known.

**Hazardous decomposition products** None known.

### 11. Toxicological information

#### Information on toxicological effects

**Toxicological effects** Please read Section 2 thoroughly to understand the toxicological risks, (if any) and precautions for safe use (if any).

#### Skin corrosion/irritation

##### Skin sensitization

**Skin sensitization** Based on available data the classification criteria are not met.

**Eye contact** May cause temporary eye irritation.

### 12. Ecological Information

**Ecotoxicity** Please read Section 2 completely. If any environmental warnings such as; H411 or H412 are listed in Section 2, please use appropriate procedures when disposing of product and container. Do not put materials into waterways or sewers.

#### Toxicity

**Toxicity** Please read Section 2 completely. If any environmental warnings such as; H411 or H412 are listed in Section 2, please use appropriate procedures when disposing of product and container. Do not put materials into waterways or sewers.

#### Persistence and degradability

**Persistence and degradability** No data available.

**Biodegradation** Not inherently biodegradable.

#### Bioaccumulative potential

**Partition coefficient** No information available.

#### Mobility in soil

**Mobility** Semi-mobile.

#### Results of PBT and vPvB assessment

**Results of PBT and vPvB assessment** This product does not contain any substances classified as PBT or vPvB.

## CTL 10 PEPPERMINT ICE

### Other adverse effects

Other adverse effects           None known.

### 13. Disposal considerations

#### Waste treatment methods

**General information**           Dispose of waste product or used containers in accordance with local regulations. When handling waste, the safety precautions applying to handling of the product should be considered.

### 14. Transport information

**General**                       The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, DoT).

#### UN Number

Not applicable.

#### UN proper shipping name

Not applicable.

#### Transport hazard class(es)

No transport warning sign required.

#### Packing group

Not applicable.

#### Environmental hazards

##### **Environmentally Hazardous Substance**

Please refer to Section 2 for any environmental hazards associated with this product. If H411/H412 warnings are shown then please verify packaging and labeling requirements for larger volumes.

#### Special precautions for user

Not applicable.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**   Not applicable.

### 15. Regulatory information

#### International Regulations

#### US State Regulations

##### **California Proposition 65 Carcinogens and Reproductive Toxins**

None of the ingredients are listed or exempt.

##### **Massachusetts "Right To Know" List**

###### *Hydrated Aluminium Silicate*

5-10%

###### *silica*

1-5%

###### *zinc oxide*

1-5%

**CTL 10 PEPPERMINT ICE***2-aminoethanol*

&lt;1%

**Rhode Island "Right To Know" List***Hydrated Aluminium Silicate*

5-10%

*silica*

1-5%

*zinc oxide*

1-5%

*2-aminoethanol*

&lt;1%

**Minnesota "Right To Know" List***Hydrated Aluminium Silicate*

5-10%

*silica*

1-5%

*zinc oxide*

1-5%

*2-aminoethanol*

&lt;1%

**Pennsylvania "Right To Know" List***Hydrated Aluminium Silicate*

5-10%

*silica*

1-5%

*zinc oxide*

1-5%

*2-aminoethanol*

&lt;1%

**Inventories****Canada - DSL/NDSL**

All the ingredients are listed or exempt.

**US - TSCA**

All the ingredients are listed or exempt.

**US - TSCA 12(b) Export Notification**

All the ingredients are listed or exempt.

**16. Other information****General information**

The following are the top 5 materials by weight listed for New Jersey (if applicable):- Water  
7732-18-5, Non Lead Frit65997-18-4, Hydrated Aluminum Silicate1332-58-7, Calcium Silicate  
13983-17-0  
Various Pigments

**Revision date**

7/28/2016

**CTL 10 PEPPERMINT ICE**

<b>Revision</b>	3
<b>Supersedes date</b>	7/27/2016
<b>SDS No.</b>	4981

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.



## SAFETY DATA SHEET

### CTL 11 SNOW FIRE

#### 1. Identification

##### Product identifier

Product name CTL 11 SNOW FIRE

Product number CTL 11 SNOW FIRE

##### Recommended use of the chemical and restrictions on use

Application ceramic glaze

##### Details of the supplier of the safety data sheet

Supplier American Art Clay Co Inc  
6060 Guion Road  
Indianapolis,  
IN 46254-1222  
USA  
Toll Free: 1-800-925-5195 ext. 1303  
Local: 1-317-243-0066 ext. 1303

##### Emergency telephone number

Emergency telephone 1 317 243 0066 ext. 1303 Mon-Fri, 0900-1700 EST

#### 2. Hazard(s) identification

##### Classification of the substance or mixture

Physical hazards Not Classified

Health hazards Not Classified

##### Label elements

Hazard statements NC Not Classified

##### Other hazards

none present

#### 3. Composition/information on ingredients

##### Mixtures

Composition comments Only ingredients listed above are notifiable for this product. If none are shown then all ingredients are exempt.

#### 4. First-aid measures

##### Description of first aid measures

General information --

Ingestion Do not induce vomiting. Rinse mouth thoroughly with water. Give a few small glasses of water or milk to drink. Get medical attention if any discomfort continues.

Skin Contact Wash skin thoroughly with soap and water.

Eye contact Rinse with water.

##### Most important symptoms and effects, both acute and delayed

Inhalation Read Section 2 for any specific precautions associated with this product. In general, breathing any type of dust / mist can and may aggravate irritation of the throat and lungs.

## CTL 11 SNOW FIRE

<b>Ingestion</b>	Read Section 2 for any specific precautions associated with the use of this product. Products with specific warnings about ingestion will give guidance there.
<b>Skin contact</b>	Read Section 2 for any specific precautions associated with the use of this product. In general most ceramic glazes, clays and special products will tend to have a drying effect on the skin and may cause some sensitivity to users with sensitive skin.
<b>Eye contact</b>	Read Section 2 for any specific precautions associated with the use of this product. In general most ceramic and special products contain materials that maybe abrasive to eyes. Keeping materials from contacting the eyes is prudent. If contact does occur, flush with clean water, do not rub.

### Indication of immediate medical attention and special treatment needed

**Notes for the doctor**                      Treat symptomatically.

### **5. Fire-fighting measures**

#### Extinguishing media

**Suitable extinguishing media**    Use fire-extinguishing media suitable for the surrounding fire.

#### Special hazards arising from the substance or mixture

**Specific hazards**                      The product is not believed to present a hazard due to its physical nature.

#### Advice for firefighters

**Special protective equipment for firefighters**    Use protective equipment appropriate for surrounding materials.

### **6. Accidental release measures**

#### Personal precautions, protective equipment and emergency procedures

**Personal precautions**                      For personal protection, see Section 8.

#### Environmental precautions

**Environmental precautions**            Please read Section 2 completely. If any environmental warnings such as; H411 or H412 are listed in Section 2, please use appropriate procedures when disposing of product and container. Do not put materials into waterways or sewers.

#### Methods and material for containment and cleaning up

**Methods for cleaning up**                      Collect spillage for reclamation or absorb in vermiculite, dry sand or similar material

**Reference to other sections**                For waste disposal, see Section 13. For personal protection, see Section 8.

### **7. Handling and storage**

#### Precautions for safe handling

**Usage precautions**                      Read label before use. Do not eat, drink or smoke when using this product. Good personal hygiene procedures should be implemented. Wash hands and any other contaminated areas of the body with soap and water before leaving the work site.

#### Conditions for safe storage, including any incompatibilities

**Storage precautions**                      Store in tightly-closed, original container in a dry and cool place.

#### Specific end uses(s)

**Specific end use(s)**                      The identified uses for this product are detailed in Section 1.2.

### **8. Exposure Controls/personal protection**

## CTL 11 SNOW FIRE

### Control parameters

**Ingredient comments** Only ingredients listed in Section 3 are notifiable for this product. If none are shown then all ingredients are exempt.

### Exposure controls

**Appropriate engineering controls** No specific ventilation requirements unless the "FAN" pictogram is shown above or specified in Section 2.

**Eye/face protection** No specific eye protection required unless the "EYE PROTECTION" pictogram is shown above or specified in Section 2.

**Hand protection** No specific hand protection required unless the "HAND PROTECTION" pictogram is shown above or specified in Section 2.

**Hygiene measures** Using good personal hygiene practices is always appropriate. Keeping a clean work space, cleaning up properly when done, and not eating, drinking or smoking when using this product.

**Respiratory protection** No specific respiratory protection required unless the "RESPIRATOR" pictogram is shown above or specified in Section 2. Using the appropriate certified protection for the operation is important if required.

## 9. Physical and Chemical Properties

### Information on basic physical and chemical properties

<b>Appearance</b>	Colored liquid.
<b>Color</b>	Various colors.
<b>Odor</b>	Almost odorless.
<b>Odor threshold</b>	No information available.
<b>pH</b>	6-8
<b>Melting point</b>	No information available.
<b>Initial boiling point and range</b>	No information available.
<b>Flash point</b>	No information available.
<b>Evaporation rate</b>	No information available.
<b>Flammability (solid, gas)</b>	No information available.
<b>Upper/lower flammability or explosive limits</b>	No information available.
<b>Vapor pressure</b>	No information available.
<b>Relative density</b>	Greater than 1.0
<b>Solubility(ies)</b>	Not applicable.
<b>Partition coefficient</b>	No information available.
<b>Auto-ignition temperature</b>	Not applicable.
<b>Decomposition Temperature</b>	No information available.
<b>Viscosity</b>	No information available.
<b>Explosive properties</b>	none
<b>Oxidizing properties</b>	none

**CTL 11 SNOW FIRE**

**Other information** Not applicable.

**10. Stability and reactivity**

**Reactivity** There are no known reactivity hazards associated with this product.

**Stability** No particular stability concerns.

**Possibility of hazardous reactions** None known.

**Conditions to avoid** None known.

**Materials to avoid** None known.

**Hazardous decomposition products** None known.

**11. Toxicological information****Information on toxicological effects**

**Toxicological effects** Please read Section 2 thoroughly to understand the toxicological risks, (if any) and precautions for safe use (if any).

**Skin corrosion/irritation****Skin sensitization**

**Skin sensitization** Based on available data the classification criteria are not met.

**Eye contact** May cause temporary eye irritation.

**12. Ecological Information**

**Ecotoxicity** Please read Section 2 completely. If any environmental warnings such as; H411 or H412 are listed in Section 2, please use appropriate procedures when disposing of product and container. Do not put materials into waterways or sewers.

**Toxicity**

**Toxicity** Please read Section 2 completely. If any environmental warnings such as; H411 or H412 are listed in Section 2, please use appropriate procedures when disposing of product and container. Do not put materials into waterways or sewers.

**Persistence and degradability**

**Persistence and degradability** No data available.

**Biodegradation** Not inherently biodegradable.

**Bioaccumulative potential**

**Partition coefficient** No information available.

**Mobility in soil**

**Mobility** Semi-mobile.

**Results of PBT and vPvB assessment**

**Results of PBT and vPvB assessment** This product does not contain any substances classified as PBT or vPvB.

## CTL 11 SNOW FIRE

### Other adverse effects

Other adverse effects            None known.

### 13. Disposal considerations

#### Waste treatment methods

**General information**            Dispose of waste product or used containers in accordance with local regulations. When handling waste, the safety precautions applying to handling of the product should be considered.

### 14. Transport information

**General**                            The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, DoT).

#### UN Number

Not applicable.

#### UN proper shipping name

Not applicable.

#### Transport hazard class(es)

No transport warning sign required.

#### Packing group

Not applicable.

#### Environmental hazards

##### **Environmentally Hazardous Substance**

Please refer to Section 2 for any environmental hazards associated with this product. If H411/H412 warnings are shown then please verify packaging and labeling requirements for larger volumes.

#### Special precautions for user

Not applicable.

**Transport in bulk according to**    Not applicable.

**Annex II of MARPOL 73/78  
and the IBC Code**

### 15. Regulatory Information

#### International Regulations

#### US State Regulations

##### **California Proposition 65 Carcinogens and Reproductive Toxins**

None of the ingredients are listed or exempt.

##### **Massachusetts "Right To Know" List**

*zinc oxide*

1-5%

*Hydrated Aluminium Silicate*

5-10%

*silica*

1-5%

## CTL 11 SNOW FIRE

*2-aminoethanol*

<1%

### **Rhode Island "Right To Know" List**

*zinc oxide*

1-5%

*Hydrated Aluminium Silicate*

5-10%

*silica*

1-5%

*2-aminoethanol*

<1%

### **Minnesota "Right To Know" List**

*zinc oxide*

1-5%

*Hydrated Aluminium Silicate*

5-10%

*silica*

1-5%

*2-aminoethanol*

<1%

### **New Jersey "Right To Know" List**

*zinc oxide*

1-5%

*Hydrated Aluminium Silicate*

5-10%

*silica*

1-5%

*2-aminoethanol*

<1%

### **Pennsylvania "Right To Know" List**

*zinc oxide*

1-5%

*Hydrated Aluminium Silicate*

5-10%

*silica*

1-5%

*2-aminoethanol*

<1%

### **Inventories**

#### **Canada - DSL/NDSL**

All the ingredients are listed or exempt.

## CTL 11 SNOW FIRE

### US - TSCA

All the ingredients are listed or exempt.

### US - TSCA 12(b) Export Notification

All the ingredients are listed or exempt.

### 16. Other information

<b>General information</b>	The following are the top 5 materials by weight listed for New Jersey (if applicable):- Water 7732-18-5, Non Lead Frit65997-18-4, Hydrated Aluminum Silicate1332-58-7, Calcium Silicate 13983-17-0 Various Pigments
<b>Revision date</b>	7/28/2016
<b>Revision</b>	3
<b>Supersedes date</b>	7/27/2016
<b>SDS No.</b>	4982

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## SAFETY DATA SHEET

### CTL 15 MOON SCAPE

#### 1. Identification

##### Product identifier

Product name CTL 15 MOON SCAPE

Product number CTL 15 MOON SCAPE

##### Recommended use of the chemical and restrictions on use

Application ceramic glaze

##### Details of the supplier of the safety data sheet

Supplier American Art Clay Co Inc  
6060 Guion Road  
Indianapolis,  
IN 46254-1222  
USA  
Toll Free: 1-800-925-5195 ext. 1303  
Local: 1-317-243-0066 ext. 1303

##### Emergency telephone number

Emergency telephone 1 317 243 0066 ext. 1303 Mon-Fri, 0900-1700 EST

#### 2. Hazard(s) Identification

##### Classification of the substance or mixture

Physical hazards Not Classified

Health hazards Not Classified

Environmental hazards Not Classified

##### Label elements

Hazard statements NC Not Classified

##### Other hazards

none present

#### 3. Composition/information on ingredients

##### Mixtures

Composition comments Only ingredients listed above are notifiable for this product. If none are shown then all ingredients are exempt.

#### 4. First-aid measures

##### Description of first aid measures

General information --

Ingestion Do not induce vomiting. Rinse mouth thoroughly with water. Give a few small glasses of water or milk to drink. Get medical attention if any discomfort continues.

Skin Contact Wash skin thoroughly with soap and water.

Eye contact Rinse with water.

##### Most important symptoms and effects, both acute and delayed



## CTL 15 MOON SCAPE

<b>Inhalation</b>	Read Section 2 for any specific precautions associated with this product. In general, breathing any type of dust / mist can and may aggravate irritation of the throat and lungs.
<b>Ingestion</b>	Read Section 2 for any specific precautions associated with the use of this product. Products with specific warnings about ingestion will give guidance there.
<b>Skin contact</b>	Read Section 2 for any specific precautions associated with the use of this product. In general most ceramic glazes, clays and special products will tend to have a drying effect on the skin and may cause some sensitivity to users with sensitive skin.
<b>Eye contact</b>	Read Section 2 for any specific precautions associated with the use of this product. In general most ceramic and special products contain materials that maybe abrasive to eyes. Keeping materials from contacting the eyes is prudent. If contact does occur, flush with clean water, do not rub.

### Indication of immediate medical attention and special treatment needed

**Notes for the doctor** Treat symptomatically.

### 5. Fire-fighting measures

#### Extinguishing media

**Suitable extinguishing media** Use fire-extinguishing media suitable for the surrounding fire.

#### Special hazards arising from the substance or mixture

**Specific hazards** The product is not believed to present a hazard due to its physical nature.

#### Advice for firefighters

**Special protective equipment for firefighters** Use protective equipment appropriate for surrounding materials.

### 6. Accidental release measures

#### Personal precautions, protective equipment and emergency procedures

**Personal precautions** For personal protection, see Section 8.

#### Environmental precautions

**Environmental precautions** Please read Section 2 completely. If any environmental warnings such as; H411 or H412 are listed in Section 2, please use appropriate procedures when disposing of product and container. Do not put materials into waterways or sewers.

#### Methods and material for containment and cleaning up

**Methods for cleaning up** Collect spillage for reclamation or absorb in vermiculite, dry sand or similar material

**Reference to other sections** For waste disposal, see Section 13. For personal protection, see Section 8.

### 7. Handling and storage

#### Precautions for safe handling

**Usage precautions** Read label before use. Do not eat, drink or smoke when using this product. Good personal hygiene procedures should be implemented. Wash hands and any other contaminated areas of the body with soap and water before leaving the work site.

#### Conditions for safe storage, including any incompatibilities

**Storage precautions** Store in tightly-closed, original container in a dry and cool place.

#### Specific end uses(s)

**Specific end use(s)** The identified uses for this product are detailed in Section 1.2.

## CTL 15 MOON SCAPE

### 8. Exposure Controls/personal protection

#### Control parameters

**Ingredient comments** Only ingredients listed in Section 3 are notifiable for this product. If none are shown then all ingredients are exempt.

#### Exposure controls

**Appropriate engineering controls** No specific ventilation requirements unless the "FAN" pictogram is shown above or specified in Section 2.

**Eye/face protection** No specific eye protection required unless the "EYE PROTECTION" pictogram is shown above or specified in Section 2.

**Hand protection** No specific hand protection required unless the "HAND PROTECTION" pictogram is shown above or specified in Section 2.

**Hygiene measures** Using good personal hygiene practices is always appropriate. Keeping a clean work space, cleaning up properly when done, and not eating, drinking or smoking when using this product.

**Respiratory protection** No specific respiratory protection required unless the "RESPIRATOR" pictogram is shown above or specified in Section 2. Using the appropriate certified protection for the operation is important if required.

### 9. Physical and Chemical Properties

#### Information on basic physical and chemical properties

<b>Appearance</b>	Colored liquid.
<b>Color</b>	Various colors.
<b>Odor</b>	Almost odorless.
<b>Odor threshold</b>	No information available.
<b>pH</b>	6-8
<b>Melting point</b>	No information available.
<b>Initial boiling point and range</b>	No information available.
<b>Flash point</b>	No information available.
<b>Evaporation rate</b>	No information available.
<b>Flammability (solid, gas)</b>	No information available.
<b>Upper/lower flammability or explosive limits</b>	No information available.
<b>Vapor pressure</b>	No information available.
<b>Relative density</b>	Greater than 1.0
<b>Solubility(ies)</b>	Not applicable.
<b>Partition coefficient</b>	No information available.
<b>Auto-ignition temperature</b>	Not applicable.
<b>Decomposition Temperature</b>	No information available.
<b>Viscosity</b>	No information available.
<b>Explosive properties</b>	none

## CTL 15 MOON SCAPE

Oxidizing properties none

Other information Not applicable.

### 10. Stability and reactivity

**Reactivity** There are no known reactivity hazards associated with this product.

**Stability** No particular stability concerns.

**Possibility of hazardous reactions** None known.

**Conditions to avoid** None known.

**Materials to avoid** None known.

**Hazardous decomposition products** None known.

### 11. Toxicological information

#### Information on toxicological effects

**Toxicological effects** Please read Section 2 thoroughly to understand the toxicological risks, (if any) and precautions for safe use (if any).

#### Skin corrosion/irritation

#### Skin sensitization

**Skin sensitization** Based on available data the classification criteria are not met.

**Eye contact** May cause temporary eye irritation.

### 12. Ecological Information

**Ecotoxicity** Please read Section 2 completely. If any environmental warnings such as; H411 or H412 are listed in Section 2, please use appropriate procedures when disposing of product and container. Do not put materials into waterways or sewers.

#### Toxicity

**Toxicity** Please read Section 2 completely. If any environmental warnings such as; H411 or H412 are listed in Section 2, please use appropriate procedures when disposing of product and container. Do not put materials into waterways or sewers.

#### Persistence and degradability

**Persistence and degradability** No data available.

**Biodegradation** Not inherently biodegradable.

#### Bioaccumulative potential

**Partition coefficient** No information available.

#### Mobility in soil

**Mobility** Semi-mobile.

#### Results of PBT and vPvB assessment

## CTL 15 MOON SCAPE

**Results of PBT and vPvB assessment**

This product does not contain any substances classified as PBT or vPvB.

**Other adverse effects****Other adverse effects**

None known.

**13. Disposal considerations****Waste treatment methods****General information**

Dispose of waste product or used containers in accordance with local regulations. When handling waste, the safety precautions applying to handling of the product should be considered.

**14. Transport information****General**

The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, DoT).

**UN Number**

Not applicable.

**UN proper shipping name**

Not applicable.

**Transport hazard class(es)**

No transport warning sign required.

**Packing group**

Not applicable.

**Environmental hazards****Environmentally Hazardous Substance**

Please refer to Section 2 for any environmental hazards associated with this product. If H411/H412 warnings are shown then please verify packaging and labeling requirements for larger volumes.

**Special precautions for user**

Not applicable.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not applicable.

**15. Regulatory information****International Regulations****US State Regulations****California Proposition 65 Carcinogens and Reproductive Toxins**

None of the ingredients are listed or exempt.

**Massachusetts "Right To Know" List**

*2-aminoethanol*

<1%

*Hydrated Aluminium Silicate*

1-5%

## CTL 15 MOON SCAPE

### Rhode Island "Right To Know" List

*2-aminoethanol*

<1%

*Hydrated Aluminium Silicate*

1-5%

### Minnesota "Right To Know" List

*2-aminoethanol*

<1%

*Hydrated Aluminium Silicate*

1-5%

### New Jersey "Right To Know" List

*2-aminoethanol*

<1%

*Hydrated Aluminium Silicate*

1-5%

### Pennsylvania "Right To Know" List

*2-aminoethanol*

<1%

*Hydrated Aluminium Silicate*

1-5%

### Inventories

#### Canada - DSL/NDSL

All the ingredients are listed or exempt.

#### US - TSCA

All the ingredients are listed or exempt.

#### US - TSCA 12(b) Export Notification

All the ingredients are listed or exempt.

### 16. Other information

<b>General information</b>	The following are the top 5 materials by weight listed for New Jersey (if applicable):- Water 7732-18-5, Non Lead Frit65997-18-4, Hydrated Aluminum Silicate1332-58-7, Calcium Silicate 13983-17-0 Various Pigments
<b>Revision date</b>	7/28/2016
<b>Revision</b>	3
<b>Supersedes date</b>	7/27/2016
<b>SDS No.</b>	4984

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## SAFETY DATA SHEET

### CTL 31 BROWN EARTH

#### 1. Identification

##### Product identifier

**Product name** CTL 31 BROWN EARTH  
**Product number** CTL 31 BROWN EARTH

##### Recommended use of the chemical and restrictions on use

**Application** ceramic glaze

##### Details of the supplier of the safety data sheet

**Supplier** American Art Clay Co Inc  
6060 Guion Road  
Indianapolis,  
IN 46254-1222  
USA  
Toll Free: 1-800-925-5195 ext. 1303  
Local: 1-317-243-0066 ext. 1303

##### Emergency telephone number

**Emergency telephone** 1 317 243 0066 ext. 1303 Mon-Fri, 0900-1700 EST

#### 2. Hazard(s) identification

##### Classification of the substance or mixture

**Physical hazards** Not Classified  
**Health hazards** Not Classified

##### Label elements

**Hazard statements** NC Not Classified

##### Other hazards

none present

#### 3. Composition/information on ingredients

##### Mixtures

**Composition comments** Only ingredients listed above are notifiable for this product. If none are shown then all ingredients are exempt.

#### 4. First-aid measures

##### Description of first aid measures

##### General information

--

**Ingestion** Do not induce vomiting. Rinse mouth thoroughly with water. Give a few small glasses of water or milk to drink. Get medical attention if any discomfort continues.

**Skin Contact** Wash skin thoroughly with soap and water.

**Eye contact** Rinse with water.

##### Most important symptoms and effects, both acute and delayed

**Inhalation** Read Section 2 for any specific precautions associated with this product. In general, breathing any type of dust / mist can and may aggravate irritation of the throat and lungs.

## CTL 31 BROWN EARTH

<b>Ingestion</b>	Read Section 2 for any specific precautions associated with the use of this product. Products with specific warnings about ingestion will give guidance there.
<b>Skin contact</b>	Read Section 2 for any specific precautions associated with the use of this product. In general most ceramic glazes, clays and special products will tend to have a drying effect on the skin and may cause some sensitivity to users with sensitive skin.
<b>Eye contact</b>	Read Section 2 for any specific precautions associated with the use of this product. In general most ceramic and special products contain materials that maybe abrasive to eyes. Keeping materials from contacting the eyes is prudent. If contact does occur, flush with clean water, do not rub.

### Indication of immediate medical attention and special treatment needed

**Notes for the doctor** Treat symptomatically.

### 5. Fire-fighting measures

#### Extinguishing media

**Suitable extinguishing media** Use fire-extinguishing media suitable for the surrounding fire.

#### Special hazards arising from the substance or mixture

**Specific hazards** The product is not believed to present a hazard due to its physical nature.

#### Advice for firefighters

**Special protective equipment for firefighters** Use protective equipment appropriate for surrounding materials.

### 6. Accidental release measures

#### Personal precautions, protective equipment and emergency procedures

**Personal precautions** For personal protection, see Section 8.

#### Environmental precautions

**Environmental precautions** Please read Section 2 completely. If any environmental warnings such as; H411 or H412 are listed in Section 2, please use appropriate procedures when disposing of product and container. Do not put materials into waterways or sewers.

#### Methods and material for containment and cleaning up

**Methods for cleaning up** Collect spillage for reclamation or absorb in vermiculite, dry sand or similar material

**Reference to other sections** For waste disposal, see Section 13. For personal protection, see Section 8.

### 7. Handling and storage

#### Precautions for safe handling

**Usage precautions** Read label before use. Do not eat, drink or smoke when using this product. Good personal hygiene procedures should be implemented. Wash hands and any other contaminated areas of the body with soap and water before leaving the work site.

#### Conditions for safe storage, including any incompatibilities

**Storage precautions** Store in tightly-closed, original container in a dry and cool place.

#### Specific end uses(s)

**Specific end use(s)** The identified uses for this product are detailed in Section 1.2.

### 8. Exposure Controls/personal protection

## CTL 31 BROWN EARTH

### Control parameters

**Ingredient comments** Only ingredients listed in Section 3 are notifiable for this product. If none are shown then all ingredients are exempt.

### Exposure controls

**Appropriate engineering controls** No specific ventilation requirements unless the "FAN" pictogram is shown above or specified in Section 2.

**Eye/face protection** No specific eye protection required unless the "EYE PROTECTION" pictogram is shown above or specified in Section 2.

**Hand protection** No specific hand protection required unless the "HAND PROTECTION" pictogram is shown above or specified in Section 2.

**Hygiene measures** Using good personal hygiene practices is always appropriate. Keeping a clean work space, cleaning up properly when done, and not eating, drinking or smoking when using this product.

**Respiratory protection** No specific respiratory protection required unless the "RESPIRATOR" pictogram is shown above or specified in Section 2. Using the appropriate certified protection for the operation is important if required.

## 9. Physical and Chemical Properties

### Information on basic physical and chemical properties

<b>Appearance</b>	Colored liquid.
<b>Color</b>	Various colors.
<b>Odor</b>	Almost odorless.
<b>Odor threshold</b>	No information available.
<b>pH</b>	6-8
<b>Melting point</b>	No information available.
<b>Initial boiling point and range</b>	No information available.
<b>Flash point</b>	No information available.
<b>Evaporation rate</b>	No information available.
<b>Flammability (solid, gas)</b>	No information available.
<b>Upper/lower flammability or explosive limits</b>	No information available.
<b>Vapor pressure</b>	No information available.
<b>Relative density</b>	Greater than 1.0
<b>Solubility(ies)</b>	Not applicable.
<b>Partition coefficient</b>	No information available.
<b>Auto-ignition temperature</b>	Not applicable.
<b>Decomposition Temperature</b>	No information available.
<b>Viscosity</b>	No information available.
<b>Explosive properties</b>	none
<b>Oxidizing properties</b>	none



## CTL 31 BROWN EARTH

Other information Not applicable.

### 10. Stability and reactivity

**Reactivity** There are no known reactivity hazards associated with this product.

**Stability** No particular stability concerns.

**Possibility of hazardous reactions** None known.

**Conditions to avoid** None known.

**Materials to avoid** None known.

**Hazardous decomposition products** None known.

### 11. Toxicological information

#### Information on toxicological effects

**Toxicological effects** Please read Section 2 thoroughly to understand the toxicological risks, (if any) and precautions for safe use (if any).

#### Skin corrosion/Irritation

#### Skin sensitization

**Skin sensitization** Based on available data the classification criteria are not met.

**Eye contact** May cause temporary eye irritation.

### 12. Ecological Information

**Ecotoxicity** Please read Section 2 completely. If any environmental warnings such as; H411 or H412 are listed in Section 2, please use appropriate procedures when disposing of product and container. Do not put materials into waterways or sewers.

#### Toxicity

**Toxicity** Please read Section 2 completely. If any environmental warnings such as; H411 or H412 are listed in Section 2, please use appropriate procedures when disposing of product and container. Do not put materials into waterways or sewers.

#### Persistence and degradability

**Persistence and degradability** No data available.

**Biodegradation** Not inherently biodegradable.

#### Bioaccumulative potential

**Partition coefficient** No information available.

#### Mobility in soil

**Mobility** Semi-mobile.

#### Results of PBT and vPvB assessment

**Results of PBT and vPvB assessment** This product does not contain any substances classified as PBT or vPvB.

## CTL 31 BROWN EARTH

### Other adverse effects

Other adverse effects           None known.

### 13. Disposal considerations

#### Waste treatment methods

**General information**           Dispose of waste product or used containers in accordance with local regulations. When handling waste, the safety precautions applying to handling of the product should be considered.

### 14. Transport information

**General**                           The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, DoT).

#### UN Number

Not applicable.

#### UN proper shipping name

Not applicable.

#### Transport hazard class(es)

No transport warning sign required.

#### Packing group

Not applicable.

#### Environmental hazards

##### **Environmentally Hazardous Substance**

Please refer to Section 2 for any environmental hazards associated with this product. If H411/H412 warnings are shown then please verify packaging and labeling requirements for larger volumes.

#### Special precautions for user

Not applicable.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**   Not applicable.

### 15. Regulatory information

#### International Regulations

#### US State Regulations

##### **California Proposition 65 Carcinogens and Reproductive Toxins**

None of the ingredients are listed or exempt.

##### **Massachusetts "Right To Know" List**

*zinc oxide*

1-5%

*red iron oxide*

<1%

*2-aminoethanol*

<1%

## CTL 31 BROWN EARTH

*aluminium oxide*

1-5%

*Hydrated Aluminium Silicate*

1-5%

### **Rhode Island "Right To Know" List**

*zinc oxide*

1-5%

*red iron oxide*

<1%

*2-aminoethanol*

<1%

*aluminium oxide*

1-5%

*Hydrated Aluminium Silicate*

1-5%

### **Minnesota "Right To Know" List**

*zinc oxide*

1-5%

*red iron oxide*

<1%

*2-aminoethanol*

<1%

*aluminium oxide*

1-5%

*Hydrated Aluminium Silicate*

1-5%

### **New Jersey "Right To Know" List**

*zinc oxide*

1-5%

*red iron oxide*

<1%

*2-aminoethanol*

<1%

*aluminium oxide*

1-5%

*Hydrated Aluminium Silicate*

1-5%

### **Pennsylvania "Right To Know" List**

*zinc oxide*

1-5%

*red iron oxide*

<1%

## CTL 31 BROWN EARTH

*2-aminoethanol*

<1%

*aluminium oxide*

1-5%

*Hydrated Aluminium Silicate*

1-5%

### Inventories

#### **Canada - DSL/NDSL**

All the ingredients are listed or exempt.

#### **US - TSCA**

All the ingredients are listed or exempt.

#### **US - TSCA 12(b) Export Notification**

All the ingredients are listed or exempt.

### **16. Other information**

<b>General information</b>	The following are the top 5 materials by weight listed for New Jersey (if applicable):- Water 7732-18-5, Non Lead Frit65997-18-4, Hydrated Aluminum Silicate1332-58-7, Calcium Silicate 13983-17-0 Various Pigments
<b>Revision date</b>	7/28/2016
<b>Revision</b>	3
<b>Supersedes date</b>	7/27/2016
<b>SDS No.</b>	4991

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.

## SAFETY DATA SHEET

### CTL 32 CHOCOLATE CHIP

#### 1. Identification

##### Product identifier

**Product name** CTL 32 CHOCOLATE CHIP

**Product number** CTL 32 CHOCOLATE CHIP

##### Recommended use of the chemical and restrictions on use

**Application** ceramic glaze

##### Details of the supplier of the safety data sheet

**Supplier** American Art Clay Co Inc  
6060 Guion Road  
Indianapolis,  
IN 46254-1222  
USA  
Toll Free: 1-800-925-5195 ext. 1303  
Local: 1-317-243-0066 ext. 1303

##### Emergency telephone number

**Emergency telephone** 1 317 243 0066 ext. 1303 Mon-Fri, 0900-1700 EST

#### 2. Hazard(s) identification

##### Classification of the substance or mixture

**Physical hazards** Not Classified

**Health hazards** Not Classified

##### Label elements

**Hazard statements** NC Not Classified

##### Other hazards

none present

#### 3. Composition/information on ingredients

##### Mixtures

**Composition comments** Only ingredients listed above are notifiable for this product. If none are shown then all ingredients are exempt.

#### 4. First-aid measures

##### Description of first aid measures

**General information** --

**Ingestion** Do not induce vomiting. Rinse mouth thoroughly with water. Give a few small glasses of water or milk to drink. Get medical attention if any discomfort continues.

**Skin Contact** Wash skin thoroughly with soap and water.

**Eye contact** Rinse with water.

##### Most important symptoms and effects, both acute and delayed

**Inhalation** Read Section 2 for any specific precautions associated with this product. In general, breathing any type of dust / mist can and may aggravate irritation of the throat and lungs.

## CTL 32 CHOCOLATE CHIP

<b>Ingestion</b>	Read Section 2 for any specific precautions associated with the use of this product. Products with specific warnings about ingestion will give guidance there.
<b>Skin contact</b>	Read Section 2 for any specific precautions associated with the use of this product. In general most ceramic glazes, clays and special products will tend to have a drying effect on the skin and may cause some sensitivity to users with sensitive skin.
<b>Eye contact</b>	Read Section 2 for any specific precautions associated with the use of this product. In general most ceramic and special products contain materials that maybe abrasive to eyes. Keeping materials from contacting the eyes is prudent. If contact does occur, flush with clean water, do not rub.

### Indication of immediate medical attention and special treatment needed

**Notes for the doctor** Treat symptomatically.

### 5. Fire-fighting measures

#### Extinguishing media

**Suitable extinguishing media** Use fire-extinguishing media suitable for the surrounding fire.

#### Special hazards arising from the substance or mixture

**Specific hazards** The product is not believed to present a hazard due to its physical nature.

#### Advice for firefighters

**Special protective equipment for firefighters** Use protective equipment appropriate for surrounding materials.

### 6. Accidental release measures

#### Personal precautions, protective equipment and emergency procedures

**Personal precautions** For personal protection, see Section 8.

#### Environmental precautions

**Environmental precautions** Please read Section 2 completely. If any environmental warnings such as; H411 or H412 are listed in Section 2, please use appropriate procedures when disposing of product and container. Do not put materials into waterways or sewers.

#### Methods and material for containment and cleaning up

**Methods for cleaning up** Collect spillage for reclamation or absorb in vermiculite, dry sand or similar material

**Reference to other sections** For waste disposal, see Section 13. For personal protection, see Section 8.

### 7. Handling and storage

#### Precautions for safe handling

**Usage precautions** Read label before use. Do not eat, drink or smoke when using this product. Good personal hygiene procedures should be implemented. Wash hands and any other contaminated areas of the body with soap and water before leaving the work site.

#### Conditions for safe storage, including any incompatibilities

**Storage precautions** Store in tightly-closed, original container in a dry and cool place.

#### Specific end uses(s)

**Specific end use(s)** The identified uses for this product are detailed in Section 1.2.

### 8. Exposure Controls/personal protection

## CTL 32 CHOCOLATE CHIP

### Control parameters

**Ingredient comments** Only ingredients listed in Section 3 are notifiable for this product. If none are shown then all ingredients are exempt.

### Exposure controls

**Appropriate engineering controls** No specific ventilation requirements unless the "FAN" pictogram is shown above or specified in Section 2.

**Eye/face protection** No specific eye protection required unless the "EYE PROTECTION" pictogram is shown above or specified in Section 2.

**Hand protection** No specific hand protection required unless the "HAND PROTECTION" pictogram is shown above or specified in Section 2.

**Hygiene measures** Using good personal hygiene practices is always appropriate. Keeping a clean work space, cleaning up properly when done, and not eating, drinking or smoking when using this product.

**Respiratory protection** No specific respiratory protection required unless the "RESPIRATOR" pictogram is shown above or specified in Section 2. Using the appropriate certified protection for the operation is important if required.

## 9. Physical and Chemical Properties

### Information on basic physical and chemical properties

<b>Appearance</b>	Colored liquid.
<b>Color</b>	Various colors.
<b>Odor</b>	Almost odorless.
<b>Odor threshold</b>	No information available.
<b>pH</b>	6-8
<b>Melting point</b>	No information available.
<b>Initial boiling point and range</b>	No information available.
<b>Flash point</b>	No information available.
<b>Evaporation rate</b>	No information available.
<b>Flammability (solid, gas)</b>	No information available.
<b>Upper/lower flammability or explosive limits</b>	No information available.
<b>Vapor pressure</b>	No information available.
<b>Relative density</b>	Greater than 1.0
<b>Solubility(ies)</b>	Not applicable.
<b>Partition coefficient</b>	No information available.
<b>Auto-ignition temperature</b>	Not applicable.
<b>Decomposition Temperature</b>	No information available.
<b>Viscosity</b>	No information available.
<b>Explosive properties</b>	none
<b>Oxidizing properties</b>	none

**CTL 32 CHOCOLATE CHIP**

**Other information** Not applicable.

**10. Stability and reactivity**

**Reactivity** There are no known reactivity hazards associated with this product.

**Stability** No particular stability concerns.

**Possibility of hazardous reactions** None known.

**Conditions to avoid** None known.

**Materials to avoid** None known.

**Hazardous decomposition products** None known.

**11. Toxicological information****Information on toxicological effects**

**Toxicological effects** Please read Section 2 thoroughly to understand the toxicological risks, (if any) and precautions for safe use (if any).

**Skin corrosion/irritation****Skin sensitization**

**Skin sensitization** Based on available data the classification criteria are not met.

**Eye contact** May cause temporary eye irritation.

**12. Ecological Information**

**Ecotoxicity** Please read Section 2 completely. If any environmental warnings such as; H411 or H412 are listed in Section 2, please use appropriate procedures when disposing of product and container. Do not put materials into waterways or sewers.

**Toxicity**

**Toxicity** Please read Section 2 completely. If any environmental warnings such as; H411 or H412 are listed in Section 2, please use appropriate procedures when disposing of product and container. Do not put materials into waterways or sewers.

**Persistence and degradability**

**Persistence and degradability** No data available.

**Biodegradation** Not inherently biodegradable.

**Bioaccumulative potential**

**Partition coefficient** No information available.

**Mobility in soil**

**Mobility** Semi-mobile.

**Results of PBT and vPvB assessment**

**Results of PBT and vPvB assessment** This product does not contain any substances classified as PBT or vPvB.



**CTL 32 CHOCOLATE CHIP****Other adverse effects**

Other adverse effects      None known.

**13. Disposal considerations****Waste treatment methods**

**General information**      Dispose of waste product or used containers in accordance with local regulations. When handling waste, the safety precautions applying to handling of the product should be considered.

**14. Transport information**

**General**      The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, DoT).

**UN Number**

Not applicable.

**UN proper shipping name**

Not applicable.

**Transport hazard class(es)**

No transport warning sign required.

**Packing group**

Not applicable.

**Environmental hazards****Environmentally Hazardous Substance**

Please refer to Section 2 for any environmental hazards associated with this product. If H411/H412 warnings are shown then please verify packaging and labeling requirements for larger volumes.

**Special precautions for user**

Not applicable.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**      Not applicable.

**15. Regulatory Information****International Regulations****US State Regulations****California Proposition 65 Carcinogens and Reproductive Toxins**

Known to the State of California to cause developmental and reproductive toxicity.

*lithium carb*

5-10%

**Massachusetts "Right To Know" List***zinc oxide*

1-5%

*Hydrated Aluminium Silicate*

1-5%

## CTL 32 CHOCOLATE CHIP

*Rutile*

5-10%

*lithium carb*

5-10%

*2-aminoethanol*

<1%

### **Rhode Island "Right To Know" List**

*zinc oxide*

1-5%

*Hydrated Aluminium Silicate*

1-5%

*Rutile*

5-10%

*2-aminoethanol*

<1%

### **Minnesota "Right To Know" List**

*zinc oxide*

*Hydrated Aluminium Silicate*

*Rutile*

*2-aminoethanol*

### **New Jersey "Right To Know" List**

*zinc oxide*

1-5%

*Hydrated Aluminium Silicate*

1-5%

*Rutile*

5-10%

*lithium carb*

5-10%

*2-aminoethanol*

<1%

### **Pennsylvania "Right To Know" List**

*zinc oxide*

1-5%

*Hydrated Aluminium Silicate*

1-5%

*Rutile*

5-10%

*2-aminoethanol*

<1%

### **Inventories**

**CTL 32 CHOCOLATE CHIP****Canada - DSL/NDSL**

All the ingredients are listed or exempt.

**US - TSCA**

All the ingredients are listed or exempt.

**US - TSCA 12(b) Export Notification**

All the ingredients are listed or exempt.

**16. Other information**

<b>General information</b>	The following are the top 5 materials by weight listed for New Jersey (if applicable):- Water 7732-18-5, Non Lead Frit65997-18-4, Hydrated Aluminum Silicate1332-58-7, Calcium Silicate 13983-17-0 Various Pigments
<b>Revision date</b>	11/16/2016
<b>Revision</b>	4
<b>Supersedes date</b>	7/28/2016
<b>SDS No.</b>	4992

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## SAFETY DATA SHEET

### CTL 36 GINGER BREAD

#### 1. Identification

##### Product identifier

Product name CTL 36 GINGER BREAD

Product number CTL 36 GINGER BREAD

##### Recommended use of the chemical and restrictions on use

Application ceramic glaze

##### Details of the supplier of the safety data sheet

Supplier American Art Clay Co Inc  
6060 Guion Road  
Indianapolis,  
IN 46254-1222  
USA  
Toll Free: 1-800-925-5195 ext. 1303  
Local: 1-317-243-0066 ext. 1303

##### Emergency telephone number

Emergency telephone 1 317 243 0066 ext. 1303 Mon-Fri, 0900-1700 EST

#### 2. Hazard(s) identification

##### Classification of the substance or mixture

Physical hazards Not Classified

Health hazards Not Classified

Environmental hazards Not Classified

##### Label elements

Hazard statements NC Not Classified

##### Other hazards

none present

#### 3. Composition/information on ingredients

##### Mixtures

Composition comments Only ingredients listed above are notifiable for this product. If none are shown then all ingredients are exempt.

#### 4. First-aid measures

##### Description of first aid measures

General information --

Ingestion Do not induce vomiting. Rinse mouth thoroughly with water. Give a few small glasses of water or milk to drink. Get medical attention if any discomfort continues.

Skin Contact Wash skin thoroughly with soap and water.

Eye contact Rinse with water.

##### Most important symptoms and effects, both acute and delayed

## CTL 36 GINGER BREAD

<b>Inhalation</b>	Read Section 2 for any specific precautions associated with this product. In general, breathing any type of dust / mist can and may aggravate irritation of the throat and lungs.
<b>Ingestion</b>	Read Section 2 for any specific precautions associated with the use of this product. Products with specific warnings about ingestion will give guidance there.
<b>Skin contact</b>	Read Section 2 for any specific precautions associated with the use of this product. In general most ceramic glazes, clays and special products will tend to have a drying effect on the skin and may cause some sensitivity to users with sensitive skin.
<b>Eye contact</b>	Read Section 2 for any specific precautions associated with the use of this product. In general most ceramic and special products contain materials that maybe abrasive to eyes. Keeping materials from contacting the eyes is prudent. If contact does occur, flush with clean water, do not rub.

### Indication of immediate medical attention and special treatment needed

**Notes for the doctor** Treat symptomatically.

### 5. Fire-fighting measures

#### Extinguishing media

**Suitable extinguishing media** Use fire-extinguishing media suitable for the surrounding fire.

#### Special hazards arising from the substance or mixture

**Specific hazards** The product is not believed to present a hazard due to its physical nature.

#### Advice for firefighters

**Special protective equipment for firefighters** Use protective equipment appropriate for surrounding materials.

### 6. Accidental release measures

#### Personal precautions, protective equipment and emergency procedures

**Personal precautions** For personal protection, see Section 8.

#### Environmental precautions

**Environmental precautions** Please read Section 2 completely. If any environmental warnings such as; H411 or H412 are listed in Section 2, please use appropriate procedures when disposing of product and container. Do not put materials into waterways or sewers.

#### Methods and material for containment and cleaning up

**Methods for cleaning up** Collect spillage for reclamation or absorb in vermiculite, dry sand or similar material

**Reference to other sections** For waste disposal, see Section 13. For personal protection, see Section 8.

### 7. Handling and storage

#### Precautions for safe handling

**Usage precautions** Read label before use. Do not eat, drink or smoke when using this product. Good personal hygiene procedures should be implemented. Wash hands and any other contaminated areas of the body with soap and water before leaving the work site.

#### Conditions for safe storage, including any incompatibilities

**Storage precautions** Store in tightly-closed, original container in a dry and cool place.

#### Specific end uses(s)

**Specific end use(s)** The identified uses for this product are detailed in Section 1.2.

## CTL 36 GINGER BREAD

### 8. Exposure Controls/personal protection

#### Control parameters

**Ingredient comments** Only ingredients listed in Section 3 are notifiable for this product. If none are shown then all ingredients are exempt.

#### Exposure controls

**Appropriate engineering controls** No specific ventilation requirements unless the "FAN" pictogram is shown above or specified in Section 2.

**Eye/face protection** No specific eye protection required unless the "EYE PROTECTION" pictogram is shown above or specified in Section 2.

**Hand protection** No specific hand protection required unless the "HAND PROTECTION" pictogram is shown above or specified in Section 2.

**Hygiene measures** Using good personal hygiene practices is always appropriate. Keeping a clean work space, cleaning up properly when done, and not eating, drinking or smoking when using this product.

**Respiratory protection** No specific respiratory protection required unless the "RESPIRATOR" pictogram is shown above or specified in Section 2. Using the appropriate certified protection for the operation is important if required.

### 9. Physical and Chemical Properties

#### Information on basic physical and chemical properties

<b>Appearance</b>	Colored liquid.
<b>Color</b>	Various colors.
<b>Odor</b>	Almost odorless.
<b>Odor threshold</b>	No information available.
<b>pH</b>	6-8
<b>Melting point</b>	No information available.
<b>Initial boiling point and range</b>	No information available.
<b>Flash point</b>	No information available.
<b>Evaporation rate</b>	No information available.
<b>Flammability (solid, gas)</b>	No information available.
<b>Upper/lower flammability or explosive limits</b>	No information available.
<b>Vapor pressure</b>	No information available.
<b>Relative density</b>	Greater than 1.0
<b>Solubility(ies)</b>	Not applicable.
<b>Partition coefficient</b>	No information available.
<b>Auto-ignition temperature</b>	Not applicable.
<b>Decomposition Temperature</b>	No information available.
<b>Viscosity</b>	No information available.
<b>Explosive properties</b>	none

**CTL 36 GINGER BREAD**

**Oxidizing properties** none

**Other information** Not applicable.

**10. Stability and reactivity**

**Reactivity** There are no known reactivity hazards associated with this product.

**Stability** No particular stability concerns.

**Possibility of hazardous reactions** None known.

**Conditions to avoid** None known.

**Materials to avoid** None known.

**Hazardous decomposition products** None known.

**11. Toxicological information****Information on toxicological effects**

**Toxicological effects** Please read Section 2 thoroughly to understand the toxicological risks, (if any) and precautions for safe use (if any).

**Skin corrosion/irritation****Skin sensitization**

**Skin sensitization** Based on available data the classification criteria are not met.

**Eye contact** May cause temporary eye irritation.

**12. Ecological Information**

**Ecotoxicity** Please read Section 2 completely. If any environmental warnings such as; H411 or H412 are listed in Section 2, please use appropriate procedures when disposing of product and container. Do not put materials into waterways or sewers.

**Toxicity**

**Toxicity** Please read Section 2 completely. If any environmental warnings such as; H411 or H412 are listed in Section 2, please use appropriate procedures when disposing of product and container. Do not put materials into waterways or sewers.

**Persistence and degradability**

**Persistence and degradability** No data available.

**Biodegradation** Not inherently biodegradable.

**Bioaccumulative potential**

**Partition coefficient** No information available.

**Mobility in soil**

**Mobility** Semi-mobile.

**Results of PBT and vPvB assessment**

## CTL 36 GINGER BREAD

**Results of PBT and vPvB assessment** This product does not contain any substances classified as PBT or vPvB.

**Other adverse effects**

**Other adverse effects** None known.

### 13. Disposal considerations

**Waste treatment methods**

**General information** Dispose of waste product or used containers in accordance with local regulations. When handling waste, the safety precautions applying to handling of the product should be considered.

### 14. Transport information

**General** The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, DoT).

**UN Number**

Not applicable.

**UN proper shipping name**

Not applicable.

**Transport hazard class(es)**

No transport warning sign required.

**Packing group**

Not applicable.

**Environmental hazards**

**Environmentally Hazardous Substance**

Please refer to Section 2 for any environmental hazards associated with this product. If H411/H412 warnings are shown then please verify packaging and labeling requirements for larger volumes.

**Special precautions for user**

Not applicable.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not applicable.

### 15. Regulatory information

**International Regulations**

**US State Regulations**

**California Proposition 65 Carcinogens and Reproductive Toxins**

None of the ingredients are listed or exempt.

**Massachusetts "Right To Know" List**

*red iron oxide*

1-5%

*2-aminoethanol*

<1%



## CTL 36 GINGER BREAD

*Hydrous Aluminium Silicate*

1-5%

### Rhode Island "Right To Know" List

*red iron oxide*

1-5%

*2-aminoethanol*

<1%

*Hydrous Aluminium Silicate*

1-5%

### Minnesota "Right To Know" List

*red iron oxide*

1-5%

*2-aminoethanol*

<1%

*Hydrous Aluminium Silicate*

1-5%

### New Jersey "Right To Know" List

*red iron oxide*

1-5%

*2-aminoethanol*

<1%

*Hydrous Aluminium Silicate*

1-5%

*manganese dioxide*

<1%

### Pennsylvania "Right To Know" List

*red iron oxide*

1-5%

*2-aminoethanol*

<1%

*Hydrous Aluminium Silicate*

1-5%

### Inventories

#### Canada - DSL/NDSL

All the ingredients are listed or exempt.

#### US - TSCA

All the ingredients are listed or exempt.

#### US - TSCA 12(b) Export Notification

All the ingredients are listed or exempt.

<b>16. Other Information</b>
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## CTL 36 GINGER BREAD

<b>General information</b>	The following are the top 5 materials by weight listed for New Jersey (if applicable):- Water 7732-18-5, Non Lead Frit65997-18-4, Hydrated Aluminum Silicate1332-58-7, Calcium Silicate 13983-17-0 Various Pigments
<b>Revision date</b>	7/28/2016
<b>Revision</b>	3
<b>Supersedes date</b>	7/27/2016
<b>SDS No.</b>	4995

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.

## SAFETY DATA SHEET

### CTL 41 MELON

#### 1. Identification

##### Product identifier

**Product name** CTL 41 MELON

**Product number** CTL 41 MELON

##### Recommended use of the chemical and restrictions on use

**Application** ceramic glaze

##### Details of the supplier of the safety data sheet

**Supplier** American Art Clay Co Inc  
6060 Guion Road  
Indianapolis,  
IN 46254-1222  
USA  
Toll Free: 1-800-925-5195 ext. 1303  
Local: 1-317-243-0066 ext. 1303

##### Emergency telephone number

**Emergency telephone** 1 317 243 0066 ext. 1303 Mon-Fri, 0900-1700 EST

#### 2. Hazard(s) identification

##### Classification of the substance or mixture

**Physical hazards** Not Classified

**Health hazards** Not Classified

##### Label elements

**Hazard statements** NC Not Classified

##### Other hazards

none present

#### 3. Composition/information on ingredients

##### Mixtures

**Composition comments** Only ingredients listed above are notifiable for this product. If none are shown then all ingredients are exempt.

#### 4. First-aid measures

##### Description of first aid measures

**General information** --

**Ingestion** Do not induce vomiting. Rinse mouth thoroughly with water. Give a few small glasses of water or milk to drink. Get medical attention if any discomfort continues.

**Skin Contact** Wash skin thoroughly with soap and water.

**Eye contact** Rinse with water.

##### Most important symptoms and effects, both acute and delayed

**Inhalation** Read Section 2 for any specific precautions associated with this product. In general, breathing any type of dust / mist can and may aggravate irritation of the throat and lungs.

## CTL 41 MELON

<b>Ingestion</b>	Read Section 2 for any specific precautions associated with the use of this product. Products with specific warnings about ingestion will give guidance there.
<b>Skin contact</b>	Read Section 2 for any specific precautions associated with the use of this product. In general most ceramic glazes, clays and special products will tend to have a drying effect on the skin and may cause some sensitivity to users with sensitive skin.
<b>Eye contact</b>	Read Section 2 for any specific precautions associated with the use of this product. In general most ceramic and special products contain materials that maybe abrasive to eyes. Keeping materials from contacting the eyes is prudent. If contact does occur, flush with clean water, do not rub.

### Indication of immediate medical attention and special treatment needed

**Notes for the doctor** Treat symptomatically.

### 5. Fire-fighting measures

#### Extinguishing media

**Suitable extinguishing media** Use fire-extinguishing media suitable for the surrounding fire.

#### Special hazards arising from the substance or mixture

**Specific hazards** The product is not believed to present a hazard due to its physical nature.

#### Advice for firefighters

**Special protective equipment for firefighters** Use protective equipment appropriate for surrounding materials.

### 6. Accidental release measures

#### Personal precautions, protective equipment and emergency procedures

**Personal precautions** For personal protection, see Section 8.

#### Environmental precautions

**Environmental precautions** Please read Section 2 completely. If any environmental warnings such as; H411 or H412 are listed in Section 2, please use appropriate procedures when disposing of product and container. Do not put materials into waterways or sewers.

#### Methods and material for containment and cleaning up

**Methods for cleaning up** Collect spillage for reclamation or absorb in vermiculite, dry sand or similar material

**Reference to other sections** For waste disposal, see Section 13. For personal protection, see Section 8.

### 7. Handling and storage

#### Precautions for safe handling

**Usage precautions** Read label before use. Do not eat, drink or smoke when using this product. Good personal hygiene procedures should be implemented. Wash hands and any other contaminated areas of the body with soap and water before leaving the work site.

#### Conditions for safe storage, including any incompatibilities

**Storage precautions** Store in tightly-closed, original container in a dry and cool place.

#### Specific end uses(s)

**Specific end use(s)** The identified uses for this product are detailed in Section 1.2.

### 8. Exposure Controls/personal protection

## CTL 41 MELON

### Control parameters

**Ingredient comments** Only ingredients listed in Section 3 are notifiable for this product. If none are shown then all ingredients are exempt.

### Exposure controls

**Appropriate engineering controls** No specific ventilation requirements unless the "FAN" pictogram is shown above or specified in Section 2.

**Eye/face protection** No specific eye protection required unless the "EYE PROTECTION" pictogram is shown above or specified in Section 2.

**Hand protection** No specific hand protection required unless the "HAND PROTECTION" pictogram is shown above or specified in Section 2.

**Hygiene measures** Using good personal hygiene practices is always appropriate. Keeping a clean work space, cleaning up properly when done, and not eating, drinking or smoking when using this product.

**Respiratory protection** No specific respiratory protection required unless the "RESPIRATOR" pictogram is shown above or specified in Section 2. Using the appropriate certified protection for the operation is important if required.

## 9. Physical and Chemical Properties

### Information on basic physical and chemical properties

<b>Appearance</b>	Colored liquid.
<b>Color</b>	Various colors.
<b>Odor</b>	Almost odorless.
<b>Odor threshold</b>	No information available.
<b>pH</b>	6-8
<b>Melting point</b>	No information available.
<b>Initial boiling point and range</b>	No information available.
<b>Flash point</b>	No information available.
<b>Evaporation rate</b>	No information available.
<b>Flammability (solid, gas)</b>	No information available.
<b>Upper/lower flammability or explosive limits</b>	No information available.
<b>Vapor pressure</b>	No information available.
<b>Relative density</b>	Greater than 1.0
<b>Solubility(ies)</b>	Not applicable.
<b>Partition coefficient</b>	No information available.
<b>Auto-ignition temperature</b>	Not applicable.
<b>Decomposition Temperature</b>	No information available.
<b>Viscosity</b>	No information available.
<b>Explosive properties</b>	none
<b>Oxidizing properties</b>	none

**CTL 41 MELON**

Other information Not applicable.

**10. Stability and reactivity**

**Reactivity** There are no known reactivity hazards associated with this product.

**Stability** No particular stability concerns.

**Possibility of hazardous reactions** None known.

**Conditions to avoid** None known.

**Materials to avoid** None known.

**Hazardous decomposition products** None known.

**11. Toxicological information****Information on toxicological effects**

**Toxicological effects** Please read Section 2 thoroughly to understand the toxicological risks, (if any) and precautions for safe use (if any).

**Skin corrosion/irritation****Skin sensitization**

**Skin sensitization** Based on available data the classification criteria are not met.

**Eye contact** May cause temporary eye irritation.

**12. Ecological Information**

**Ecotoxicity** Please read Section 2 completely. If any environmental warnings such as: H411 or H412 are listed in Section 2, please use appropriate procedures when disposing of product and container. Do not put materials into waterways or sewers.

**Toxicity**

**Toxicity** Please read Section 2 completely. If any environmental warnings such as: H411 or H412 are listed in Section 2, please use appropriate procedures when disposing of product and container. Do not put materials into waterways or sewers.

**Persistence and degradability**

**Persistence and degradability** No data available.

**Biodegradation** Not inherently biodegradable.

**Bioaccumulative potential**

**Partition coefficient** No information available.

**Mobility in soil**

**Mobility** Semi-mobile.

**Results of PBT and vPvB assessment**

**Results of PBT and vPvB assessment** This product does not contain any substances classified as PBT or vPvB.

## CTL 41 MELON

### Other adverse effects

Other adverse effects None known.

### 13. Disposal considerations

#### Waste treatment methods

#### **General information**

Dispose of waste product or used containers in accordance with local regulations. When handling waste, the safety precautions applying to handling of the product should be considered.

### 14. Transport information

#### **General**

The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, DoT).

#### UN Number

Not applicable.

#### UN proper shipping name

Not applicable.

#### Transport hazard class(es)

No transport warning sign required.

#### Packing group

Not applicable.

#### Environmental hazards

#### **Environmentally Hazardous Substance**

Please refer to Section 2 for any environmental hazards associated with this product. If H411/H412 warnings are shown then please verify packaging and labeling requirements for larger volumes.

#### Special precautions for user

Not applicable.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not applicable.

### 15. Regulatory information

#### International Regulations

#### US State Regulations

#### **California Proposition 65 Carcinogens and Reproductive Toxins**

None of the ingredients are listed or exempt.

#### **Massachusetts "Right To Know" List**

*silica*

1-5%

*2-aminoethanol*

<1%

*Hydrated Aluminium Silicate*

5-10%

## CTL 41 MELON

*zinc oxide*

1-5%

### **Rhode Island "Right To Know" List**

*silica*

1-5%

*2-aminoethanol*

<1%

*Hydrated Aluminium Silicate*

5-10%

*zinc oxide*

1-5%

### **Minnesota "Right To Know" List**

*silica*

1-5%

*2-aminoethanol*

<1%

*Hydrated Aluminium Silicate*

5-10%

*zinc oxide*

1-5%

### **New Jersey "Right To Know" List**

*silica*

1-5%

*2-aminoethanol*

<1%

*Hydrated Aluminium Silicate*

5-10%

*zinc oxide*

1-5%

### **Pennsylvania "Right To Know" List**

*silica*

1-5%

*2-aminoethanol*

<1%

*Hydrated Aluminium Silicate*

5-10%

*zinc oxide*

1-5%

### **Inventories**

#### **Canada - DSL/NDSL**

All the ingredients are listed or exempt.



**CTL 41 MELON****US - TSCA**

All the ingredients are listed or exempt.

**US - TSCA 12(b) Export Notification**

All the ingredients are listed or exempt.

**16. Other information**

<b>General information</b>	The following are the top 5 materials by weight listed for New Jersey (if applicable):- Water 7732-18-5, Non Lead Frit65997-18-4, Hydrated Aluminum Silicate1332-58-7, Calcium Silicate 13983-17-0 Various Pigments
<b>Revision date</b>	7/28/2016
<b>Revision</b>	3
<b>Supersedes date</b>	7/27/2016
<b>SDS No.</b>	4999

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.

## SAFETY DATA SHEET CTL 42 FANTASIA

### 1. Identification

#### Product identifier

Product name CTL 42 FANTASIA

Product number CTL 42 FANTASIA

#### Recommended use of the chemical and restrictions on use

Application ceramic glaze

#### Details of the supplier of the safety data sheet

Supplier American Art Clay Co Inc  
6060 Guion Road  
Indianapolis,  
IN 46254-1222  
USA  
Toll Free: 1-800-925-5195 ext. 1303  
Local: 1-317-243-0066 ext. 1303

#### Emergency telephone number

Emergency telephone 1 317 243 0066 ext. 1303 Mon-Fri, 0900-1700 EST

### 2. Hazard(s) identification

#### Classification of the substance or mixture

Physical hazards Not Classified

Health hazards Not Classified

Environmental hazards Not Classified

#### Label elements

Hazard statements NC Not Classified

#### Other hazards

none present

### 3. Composition/information on ingredients

#### Mixtures

Composition comments Only ingredients listed above are notifiable for this product. If none are shown then all ingredients are exempt.

### 4. First-aid measures

#### Description of first aid measures

General information --

Ingestion Do not induce vomiting. Rinse mouth thoroughly with water. Give a few small glasses of water or milk to drink. Get medical attention if any discomfort continues.

Skin Contact Wash skin thoroughly with soap and water.

Eye contact Rinse with water.

#### Most important symptoms and effects, both acute and delayed

## CTL 42 FANTASIA

<b>Inhalation</b>	Read Section 2 for any specific precautions associated with this product. In general, breathing any type of dust / mist can and may aggravate irritation of the throat and lungs.
<b>Ingestion</b>	Read Section 2 for any specific precautions associated with the use of this product. Products with specific warnings about ingestion will give guidance there.
<b>Skin contact</b>	Read Section 2 for any specific precautions associated with the use of this product. In general most ceramic glazes, clays and special products will tend to have a drying effect on the skin and may cause some sensitivity to users with sensitive skin.
<b>Eye contact</b>	Read Section 2 for any specific precautions associated with the use of this product. In general most ceramic and special products contain materials that maybe abrasive to eyes. Keeping materials from contacting the eyes is prudent. If contact does occur, flush with clean water, do not rub.

### Indication of immediate medical attention and special treatment needed

**Notes for the doctor**            Treat symptomatically.

### 5. Fire-fighting measures

#### Extinguishing media

**Suitable extinguishing media**    Use fire-extinguishing media suitable for the surrounding fire.

#### Special hazards arising from the substance or mixture

**Specific hazards**                    The product is not believed to present a hazard due to its physical nature.

#### Advice for firefighters

**Special protective equipment for firefighters**    Use protective equipment appropriate for surrounding materials.

### 6. Accidental release measures

#### Personal precautions, protective equipment and emergency procedures

**Personal precautions**            For personal protection, see Section 8.

#### Environmental precautions

**Environmental precautions**    Please read Section 2 completely. If any environmental warnings such as; H411 or H412 are listed in Section 2, please use appropriate procedures when disposing of product and container. Do not put materials into waterways or sewers.

#### Methods and material for containment and cleaning up

**Methods for cleaning up**            Collect spillage for reclamation or absorb in vermiculite, dry sand or similar material

**Reference to other sections**        For waste disposal, see Section 13. For personal protection, see Section 8.

### 7. Handling and storage

#### Precautions for safe handling

**Usage precautions**                    Read label before use. Do not eat, drink or smoke when using this product. Good personal hygiene procedures should be implemented. Wash hands and any other contaminated areas of the body with soap and water before leaving the work site.

#### Conditions for safe storage, including any incompatibilities

**Storage precautions**                Store in tightly-closed, original container in a dry and cool place.

#### Specific end uses(s)

**Specific end use(s)**                    The identified uses for this product are detailed in Section 1.2.

## CTL 42 FANTASIA

### 8. Exposure Controls/personal protection

#### Control parameters

**Ingredient comments** Only ingredients listed in Section 3 are notifiable for this product. If none are shown then all ingredients are exempt.

#### Exposure controls

**Appropriate engineering controls** No specific ventilation requirements unless the "FAN" pictogram is shown above or specified in Section 2.

**Eye/face protection** No specific eye protection required unless the "EYE PROTECTION" pictogram is shown above or specified in Section 2.

**Hand protection** No specific hand protection required unless the "HAND PROTECTION" pictogram is shown above or specified in Section 2.

**Hygiene measures** Using good personal hygiene practices is always appropriate. Keeping a clean work space, cleaning up properly when done, and not eating, drinking or smoking when using this product.

**Respiratory protection** No specific respiratory protection required unless the "RESPIRATOR" pictogram is shown above or specified in Section 2. Using the appropriate certified protection for the operation is important if required.

### 9. Physical and Chemical Properties

#### Information on basic physical and chemical properties

<b>Appearance</b>	Colored liquid.
<b>Color</b>	Various colors.
<b>Odor</b>	Almost odorless.
<b>Odor threshold</b>	No information available.
<b>pH</b>	6-8
<b>Melting point</b>	No information available.
<b>Initial boiling point and range</b>	No information available.
<b>Flash point</b>	No information available.
<b>Evaporation rate</b>	No information available.
<b>Flammability (solid, gas)</b>	No information available.
<b>Upper/lower flammability or explosive limits</b>	No information available.
<b>Vapor pressure</b>	No information available.
<b>Relative density</b>	Greater than 1.0
<b>Solubility(ies)</b>	Not applicable.
<b>Partition coefficient</b>	No information available.
<b>Auto-ignition temperature</b>	Not applicable.
<b>Decomposition Temperature</b>	No information available.
<b>Viscosity</b>	No information available.
<b>Explosive properties</b>	none

**CTL 42 FANTASIA**

<b>Oxidizing properties</b>	none
<b>Other information</b>	Not applicable.

**10. Stability and reactivity**

<b>Reactivity</b>	There are no known reactivity hazards associated with this product.
<b>Stability</b>	No particular stability concerns.
<b>Possibility of hazardous reactions</b>	None known.
<b>Conditions to avoid</b>	None known.
<b>Materials to avoid</b>	None known.
<b>Hazardous decomposition products</b>	None known.

**11. Toxicological information****Information on toxicological effects**

**Toxicological effects** Please read Section 2 thoroughly to understand the toxicological risks, (if any) and precautions for safe use (if any).

**Skin corrosion/irritation****Skin sensitization**

**Skin sensitization** Based on available data the classification criteria are not met.

**Eye contact** May cause temporary eye irritation.

**12. Ecological Information**

**Ecotoxicity** Please read Section 2 completely. If any environmental warnings such as; H411 or H412 are listed in Section 2, please use appropriate procedures when disposing of product and container. Do not put materials into waterways or sewers.

**Toxicity**

**Toxicity** Please read Section 2 completely. If any environmental warnings such as; H411 or H412 are listed in Section 2, please use appropriate procedures when disposing of product and container. Do not put materials into waterways or sewers.

**Persistence and degradability**

**Persistence and degradability** No data available.

**Biodegradation** Not inherently biodegradable.

**Bioaccumulative potential**

**Partition coefficient** No information available.

**Mobility in soil**

**Mobility** Semi-mobile.

**Results of PBT and vPvB assessment**

## CTL 42 FANTASIA

**Results of PBT and vPvB assessment** This product does not contain any substances classified as PBT or vPvB.

**Other adverse effects**

**Other adverse effects** None known.

### 13. Disposal considerations

**Waste treatment methods**

**General information** Dispose of waste product or used containers in accordance with local regulations. When handling waste, the safety precautions applying to handling of the product should be considered.

### 14. Transport information

**General** The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, DoT).

**UN Number**

Not applicable.

**UN proper shipping name**

Not applicable.

**Transport hazard class(es)**

No transport warning sign required.

**Packing group**

Not applicable.

**Environmental hazards**

**Environmentally Hazardous Substance**

Please refer to Section 2 for any environmental hazards associated with this product. If H411/H412 warnings are shown then please verify packaging and labeling requirements for larger volumes.

**Special precautions for user**

Not applicable.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not applicable.

### 15. Regulatory information

**International Regulations**

**US State Regulations**

**California Proposition 65 Carcinogens and Reproductive Toxins**

None of the ingredients are listed or exempt.

**Massachusetts "Right To Know" List**

*Hydrated Aluminium Silicate*

10-30%

*red iron oxide*

1-5%

## CTL 42 FANTASIA

*2-aminoethanol*

<1%

*silica*

5-10%

### **Rhode Island "Right To Know" List**

*Hydrated Aluminium Silicate*

10-30%

*red iron oxide*

1-5%

*2-aminoethanol*

<1%

*silica*

5-10%

### **Minnesota "Right To Know" List**

*Hydrated Aluminium Silicate*

*red iron oxide*

*2-aminoethanol*

*silica*

### **New Jersey "Right To Know" List**

*Hydrated Aluminium Silicate*

10-30%

*red iron oxide*

1-5%

*2-aminoethanol*

<1%

*silica*

5-10%

### **Pennsylvania "Right To Know" List**

*Hydrated Aluminium Silicate*

10-30%

*red iron oxide*

1-5%

*2-aminoethanol*

<1%

*silica*

5-10%

### **Inventories**

#### **Canada - DSL/NDSL**

All the ingredients are listed or exempt.

#### **US - TSCA**

All the ingredients are listed or exempt.

## CTL 42 FANTASIA

### US - TSCA 12(b) Export Notification

All the ingredients are listed or exempt.

#### 16. Other information

<b>General information</b>	The following are the top 5 materials by weight listed for New Jersey (if applicable):- Water 7732-18-5, Non Lead Frit65997-18-4, Hydrated Aluminum Silicate1332-58-7, Calcium Silicate 13983-17-0 Various Pigments
<b>Revision date</b>	7/28/2016
<b>Revision</b>	3
<b>Supersedes date</b>	7/27/2016
<b>SDS No.</b>	5000

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.



## SAFETY DATA SHEET

### CTL 43 AURORA

#### 1. Identification

##### Product identifier

Product name                    CTL 43 AURORA

Product number                CTL 43 AURORA

##### Recommended use of the chemical and restrictions on use

Application                    ceramic glaze

##### Details of the supplier of the safety data sheet

Supplier                        American Art Clay Co Inc  
6060 Guion Road  
Indianapolis,  
IN 46254-1222  
USA  
Toll Free: 1-800-925-5195 ext. 1303  
Local: 1-317-243-0066 ext. 1303

##### Emergency telephone number

Emergency telephone        1 317 243 0066 ext. 1303 Mon-Fri, 0900-1700 EST

#### 2. Hazard(s) identification

##### Classification of the substance or mixture

Physical hazards              Not Classified

Health hazards                Not Classified

##### Label elements

Hazard statements            NC Not Classified

##### Other hazards

none present

#### 3. Composition/information on ingredients

##### Mixtures

Composition comments       Only ingredients listed above are notifiable for this product. If none are shown then all ingredients are exempt.

#### 4. First-aid measures

##### Description of first aid measures

General information        --

Ingestion                      Do not induce vomiting. Rinse mouth thoroughly with water. Give a few small glasses of water or milk to drink. Get medical attention if any discomfort continues.

Skin Contact                 Wash skin thoroughly with soap and water.

Eye contact                  Rinse with water.

##### Most important symptoms and effects, both acute and delayed

Inhalation                    Read Section 2 for any specific precautions associated with this product. In general, breathing any type of dust / mist can and may aggravate irritation of the throat and lungs.

## CTL 43 AURORA

<b>Ingestion</b>	Read Section 2 for any specific precautions associated with the use of this product. Products with specific warnings about ingestion will give guidance there.
<b>Skin contact</b>	Read Section 2 for any specific precautions associated with the use of this product. In general most ceramic glazes, clays and special products will tend to have a drying effect on the skin and may cause some sensitivity to users with sensitive skin.
<b>Eye contact</b>	Read Section 2 for any specific precautions associated with the use of this product. In general most ceramic and special products contain materials that maybe abrasive to eyes. Keeping materials from contacting the eyes is prudent. If contact does occur, flush with clean water, do not rub.

### Indication of immediate medical attention and special treatment needed

**Notes for the doctor**            Treat symptomatically.

### 5. Fire-fighting measures

#### Extinguishing media

**Suitable extinguishing media**    Use fire-extinguishing media suitable for the surrounding fire.

#### Special hazards arising from the substance or mixture

**Specific hazards**                The product is not believed to present a hazard due to its physical nature.

#### Advice for firefighters

**Special protective equipment for firefighters**    Use protective equipment appropriate for surrounding materials.

### 6. Accidental release measures

#### Personal precautions, protective equipment and emergency procedures

**Personal precautions**            For personal protection, see Section 8.

#### Environmental precautions

**Environmental precautions**    Please read Section 2 completely. If any environmental warnings such as; H411 or H412 are listed in Section 2, please use appropriate procedures when disposing of product and container. Do not put materials into waterways or sewers.

#### Methods and material for containment and cleaning up

**Methods for cleaning up**        Collect spillage for reclamation or absorb in vermiculite, dry sand or similar material

**Reference to other sections**    For waste disposal, see Section 13. For personal protection, see Section 8.

### 7. Handling and storage

#### Precautions for safe handling

**Usage precautions**                Read label before use. Do not eat, drink or smoke when using this product. Good personal hygiene procedures should be implemented. Wash hands and any other contaminated areas of the body with soap and water before leaving the work site.

#### Conditions for safe storage, including any incompatibilities

**Storage precautions**            Store in tightly-closed, original container in a dry and cool place.

#### Specific end uses(s)

**Specific end use(s)**                The identified uses for this product are detailed in Section 1.2.

### 8. Exposure Controls/personal protection

## CTL 43 AURORA

### Control parameters

**Ingredient comments** Only ingredients listed in Section 3 are notifiable for this product. If none are shown then all ingredients are exempt.

### Exposure controls

**Appropriate engineering controls** No specific ventilations requirements unless the "FAN" pictogram is shown above or specified in Section 2.

**Eye/face protection** No specific eye protection required unless the "EYE PROTECTION" pictogram is shown above or specified in Section 2.

**Hand protection** No specific hand protection required unless the "HAND PROTECTION" pictogram is shown above or specified in Section 2.

**Hygiene measures** Using good personal hygiene practices is always appropriate. Keeping a clean work space, cleaning up properly when done, and not eating, drinking or smoking when using this product.

**Respiratory protection** No specific respiratory protection required unless the "RESPIRATOR" pictogram is shown above or specified in Section 2. Using the appropriate certified protection for the operation is important if required.

## 9. Physical and Chemical Properties

### Information on basic physical and chemical properties

<b>Appearance</b>	Colored liquid.
<b>Color</b>	Various colors.
<b>Odor</b>	Almost odorless.
<b>Odor threshold</b>	No information available.
<b>pH</b>	6-8
<b>Melting point</b>	No information available.
<b>Initial boiling point and range</b>	No information available.
<b>Flash point</b>	No information available.
<b>Evaporation rate</b>	No information available.
<b>Flammability (solid, gas)</b>	No information available.
<b>Upper/lower flammability or explosive limits</b>	No information available.
<b>Vapor pressure</b>	No information available.
<b>Relative density</b>	Greater than 1.0
<b>Solubility(ies)</b>	Not applicable.
<b>Partition coefficient</b>	No information available.
<b>Auto-ignition temperature</b>	Not applicable.
<b>Decomposition Temperature</b>	No information available.
<b>Viscosity</b>	No information available.
<b>Explosive properties</b>	none
<b>Oxidizing properties</b>	none

## CTL 43 AURORA

**Other information** Not applicable.

### 10. Stability and reactivity

**Reactivity** There are no known reactivity hazards associated with this product.

**Stability** No particular stability concerns.

**Possibility of hazardous reactions** None known.

**Conditions to avoid** None known.

**Materials to avoid** None known.

**Hazardous decomposition products** None known.

### 11. Toxicological information

#### Information on toxicological effects

**Toxicological effects** Please read Section 2 thoroughly to understand the toxicological risks, (if any) and precautions for safe use (if any).

#### Skin corrosion/irritation

#### Skin sensitization

**Skin sensitization** Based on available data the classification criteria are not met.

**Eye contact** May cause temporary eye irritation.

### 12. Ecological Information

**Ecotoxicity** Please read Section 2 completely. If any environmental warnings such as; H411 or H412 are listed in Section 2, please use appropriate procedures when disposing of product and container. Do not put materials into waterways or sewers.

#### Toxicity

**Toxicity** Please read Section 2 completely. If any environmental warnings such as; H411 or H412 are listed in Section 2, please use appropriate procedures when disposing of product and container. Do not put materials into waterways or sewers.

#### Persistence and degradability

**Persistence and degradability** No data available.

**Biodegradation** Not inherently biodegradable.

#### Bioaccumulative potential

**Partition coefficient** No information available.

#### Mobility in soil

**Mobility** Semi-mobile.

#### Results of PBT and vPvB assessment

**Results of PBT and vPvB assessment** This product does not contain any substances classified as PBT or vPvB.

## CTL 43 AURORA

### Other adverse effects

Other adverse effects None known.

### 13. Disposal considerations

#### Waste treatment methods

**General information** Dispose of waste product or used containers in accordance with local regulations. When handling waste, the safety precautions applying to handling of the product should be considered.

### 14. Transport information

**General** This package is shipped in accordance with ADR SP375, IATA A197 & IMDG 2.10.2.7.

#### UN Number

Not applicable.

#### UN proper shipping name

Not applicable.

#### Transport hazard class(es)

No transport warning sign required.

#### Packing group

Not applicable.

#### Environmental hazards

##### **Environmentally Hazardous Substance**

Please refer to Section 2 for any environmental hazards associated with this product. If H411/H412 warnings are shown then please verify packaging and labelling requirements for larger volumes.

#### Special precautions for user

Not applicable.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not applicable.

### 15. Regulatory information

#### International Regulations

##### US State Regulations

###### **California Proposition 65 Carcinogens and Reproductive Toxins**

Known to the State of California to cause developmental and reproductive toxicity.

*lithium carb*

5-10%

###### **Massachusetts "Right To Know" List**

*lithium carb*

5-10%

*zinc oxide*

1-5%

## CTL 43 AURORA

*Hydrated Aluminium Silicate*

1-5%

*2-aminoethanol*

<1%

*Rutile*

5-10%

### **Rhode Island "Right To Know" List**

*zinc oxide*

1-5%

*Hydrated Aluminium Silicate*

1-5%

*2-aminoethanol*

<1%

*Rutile*

5-10%

### **Minnesota "Right To Know" List**

*zinc oxide*

1-5%

*Hydrated Aluminium Silicate*

1-5%

*2-aminoethanol*

<1%

*Rutile*

5-10%

### **New Jersey "Right To Know" List**

*lithium carb*

5-10%

*zinc oxide*

1-5%

*Hydrated Aluminium Silicate*

1-5%

*2-aminoethanol*

<1%

*Rutile*

5-10%

### **Pennsylvania "Right To Know" List**

*zinc oxide*

1-5%

*Hydrated Aluminium Silicate*

1-5%

*2-aminoethanol*

<1%

**CTL 43 AURORA***Rutile*

5-10%

**Inventories****Canada - DSL/NDSL**

All the ingredients are listed or exempt.

**US - TSCA**

All the ingredients are listed or exempt.

**US - TSCA 12(b) Export Notification**

All the ingredients are listed or exempt.

**16. Other information**

<b>General information</b>	The following are the top 5 materials by weight listed for New Jersey (if applicable):- Water 7732-18-5, Non Lead Frit65997-18-4, Hydrated Aluminum Silicate1332-58-7, Calcium Silicate 13983-17-0 Various Pigments
<b>Revision date</b>	11/16/2016
<b>Revision</b>	5
<b>Supersedes date</b>	7/28/2016
<b>SDS No.</b>	5001

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.

## SAFETY DATA SHEET

### CTL 61 BUTTERCUP

#### 1. Identification

##### Product identifier

**Product name** CTL 61 BUTTERCUP

**Product number** CTL 61 BUTTERCUP

##### Recommended use of the chemical and restrictions on use

**Application** ceramic glaze

##### Details of the supplier of the safety data sheet

**Supplier** American Art Clay Co Inc  
6060 Guion Road  
Indianapolis,  
IN 46254-1222  
USA  
Toll Free: 1-800-925-5195 ext. 1303  
Local: 1-317-243-0066 ext. 1303

##### Emergency telephone number

**Emergency telephone** 1 317 243 0066 ext. 1303 Mon-Fri, 0900-1700 EST

#### 2. Hazard(s) identification

##### Classification of the substance or mixture

**Physical hazards** Not Classified

**Health hazards** Not Classified

##### Label elements

**Hazard statements** NC Not Classified

##### Other hazards

none present

#### 3. Composition/information on ingredients

##### Mixtures

**Composition comments** Only ingredients listed above are notifiable for this product. If none are shown then all ingredients are exempt.

#### 4. First-aid measures

##### Description of first aid measures

**General information** --

**Ingestion** Do not induce vomiting. Rinse mouth thoroughly with water. Give a few small glasses of water or milk to drink. Get medical attention if any discomfort continues.

**Skin Contact** Wash skin thoroughly with soap and water.

**Eye contact** Rinse with water.

##### Most important symptoms and effects, both acute and delayed

**Inhalation** Read Section 2 for any specific precautions associated with this product. In general, breathing any type of dust / mist can and may aggravate irritation of the throat and lungs.



## CTL 61 BUTTERCUP

<b>Ingestion</b>	Read Section 2 for any specific precautions associated with the use of this product. Products with specific warnings about ingestion will give guidance there.
<b>Skin contact</b>	Read Section 2 for any specific precautions associated with the use of this product. In general most ceramic glazes, clays and special products will tend to have a drying effect on the skin and may cause some sensitivity to users with sensitive skin.
<b>Eye contact</b>	Read Section 2 for any specific precautions associated with the use of this product. In general most ceramic and special products contain materials that maybe abrasive to eyes. Keeping materials from contacting the eyes is prudent. If contact does occur, flush with clean water, do not rub.

### Indication of immediate medical attention and special treatment needed

**Notes for the doctor** Treat symptomatically.

### 5. Fire-fighting measures

#### Extinguishing media

**Suitable extinguishing media** Use fire-extinguishing media suitable for the surrounding fire.

#### Special hazards arising from the substance or mixture

**Specific hazards** The product is not believed to present a hazard due to its physical nature.

#### Advice for firefighters

**Special protective equipment for firefighters** Use protective equipment appropriate for surrounding materials.

### 6. Accidental release measures

#### Personal precautions, protective equipment and emergency procedures

**Personal precautions** For personal protection, see Section 8.

#### Environmental precautions

**Environmental precautions** Please read Section 2 completely. If any environmental warnings such as: H411 or H412 are listed in Section 2, please use appropriate procedures when disposing of product and container. Do not put materials into waterways or sewers.

#### Methods and material for containment and cleaning up

**Methods for cleaning up** Collect spillage for reclamation or absorb in vermiculite, dry sand or similar material

**Reference to other sections** For waste disposal, see Section 13. For personal protection, see Section 8.

### 7. Handling and storage

#### Precautions for safe handling

**Usage precautions** Read label before use. Do not eat, drink or smoke when using this product. Good personal hygiene procedures should be implemented. Wash hands and any other contaminated areas of the body with soap and water before leaving the work site.

#### Conditions for safe storage, including any incompatibilities

**Storage precautions** Store in tightly-closed, original container in a dry and cool place.

#### Specific end uses(s)

**Specific end use(s)** The identified uses for this product are detailed in Section 1.2.

### 8. Exposure Controls/personal protection

## CTL 61 BUTTERCUP

### Control parameters

**Ingredient comments** Only ingredients listed in Section 3 are notifiable for this product. If none are shown then all ingredients are exempt.

### Exposure controls

**Appropriate engineering controls** No specific ventilations requirements unless the "FAN" pictogram is shown above or specified in Section 2.

**Eye/face protection** No specific eye protection required unless the "EYE PROTECTION" pictogram is shown above or specified in Section 2.

**Hand protection** No specific hand protection required unless the "HAND PROTECTION" pictogram is shown above or specified in Section 2.

**Hygiene measures** Using good personal hygiene practices is always appropriate. Keeping a clean work space, cleaning up properly when done, and not eating, drinking or smoking when using this product.

**Respiratory protection** No specific respiratory protection required unless the "RESPIRATOR" pictogram is shown above or specified in Section 2. Using the appropriate certified protection for the operation is important if required.

## 9. Physical and Chemical Properties

### Information on basic physical and chemical properties

<b>Appearance</b>	Colored liquid.
<b>Color</b>	Various colors.
<b>Odor</b>	Almost odorless.
<b>Odor threshold</b>	No information available.
<b>pH</b>	6-8
<b>Melting point</b>	No information available.
<b>Initial boiling point and range</b>	No information available.
<b>Flash point</b>	No information available.
<b>Evaporation rate</b>	No information available.
<b>Flammability (solid, gas)</b>	No information available.
<b>Upper/lower flammability or explosive limits</b>	No information available.
<b>Vapor pressure</b>	No information available.
<b>Relative density</b>	Greater than 1.0
<b>Solubility(ies)</b>	Not applicable.
<b>Partition coefficient</b>	No information available.
<b>Auto-ignition temperature</b>	Not applicable.
<b>Decomposition Temperature</b>	No information available.
<b>Viscosity</b>	No information available.
<b>Explosive properties</b>	none
<b>Oxidizing properties</b>	none

## CTL 61 BUTTERCUP

**Other information** Not applicable.

### 10. Stability and reactivity

**Reactivity** There are no known reactivity hazards associated with this product.

**Stability** No particular stability concerns.

**Possibility of hazardous reactions** None known.

**Conditions to avoid** None known.

**Materials to avoid** None known.

**Hazardous decomposition products** None known.

### 11. Toxicological information

#### Information on toxicological effects

**Toxicological effects** Please read Section 2 thoroughly to understand the toxicological risks, (if any) and precautions for safe use (if any).

#### Skin corrosion/irritation

#### Skin sensitization

**Skin sensitization** Based on available data the classification criteria are not met.

**Eye contact** May cause temporary eye irritation.

### 12. Ecological Information

**Ecotoxicity** Please read Section 2 completely. If any environmental warnings such as; H411 or H412 are listed in Section 2, please use appropriate procedures when disposing of product and container. Do not put materials into waterways or sewers.

#### Toxicity

**Toxicity** Please read Section 2 completely. If any environmental warnings such as; H411 or H412 are listed in Section 2, please use appropriate procedures when disposing of product and container. Do not put materials into waterways or sewers.

#### Persistence and degradability

**Persistence and degradability** No data available.

**Biodegradation** Not inherently biodegradable.

#### Bioaccumulative potential

**Partition coefficient** No information available.

#### Mobility in soil

**Mobility** Semi-mobile.

#### Results of PBT and vPvB assessment

**Results of PBT and vPvB assessment** This product does not contain any substances classified as PBT or vPvB.

## CTL 61 BUTTERCUP

### Other adverse effects

Other adverse effects None known.

### 13. Disposal considerations

#### Waste treatment methods

##### **General information**

Dispose of waste product or used containers in accordance with local regulations. When handling waste, the safety precautions applying to handling of the product should be considered.

### 14. Transport information

#### **General**

The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, DoT).

#### UN Number

Not applicable.

#### UN proper shipping name

Not applicable.

#### Transport hazard class(es)

No transport warning sign required.

#### Packing group

Not applicable.

#### Environmental hazards

##### **Environmentally Hazardous Substance**

Please refer to Section 2 for any environmental hazards associated with this product. If H411/H412 warnings are shown then please verify packaging and labeling requirements for larger volumes.

#### Special precautions for user

Not applicable.

Transport in bulk according to Not applicable.

Annex II of MARPOL 73/78  
and the IBC Code

### 15. Regulatory information

#### International Regulations

#### US State Regulations

##### **California Proposition 65 Carcinogens and Reproductive Toxins**

None of the ingredients are listed or exempt.

##### **Massachusetts "Right To Know" List**

*zinc oxide*

1-5%

*Hydrated Aluminium Silicate*

5-10%

*silica*

1-5%

## CTL 61 BUTTERCUP

*2-aminoethanol*

<1%

### **Rhode Island "Right To Know" List**

*zinc oxide*

1-5%

*Hydrated Aluminium Silicate*

5-10%

*silica*

1-5%

*2-aminoethanol*

<1%

### **Minnesota "Right To Know" List**

*zinc oxide*

1-5%

*Hydrated Aluminium Silicate*

5-10%

*silica*

1-5%

*2-aminoethanol*

<1%

### **New Jersey "Right To Know" List**

*zinc oxide*

*Hydrated Aluminium Silicate*

*silica*

*2-aminoethanol*

### **Pennsylvania "Right To Know" List**

*zinc oxide*

1-5%

*Hydrated Aluminium Silicate*

5-10%

*silica*

1-5%

*2-aminoethanol*

<1%

### **Inventories**

#### **Canada - DSL/NDSL**

All the ingredients are listed or exempt.

#### **US - TSCA**

All the ingredients are listed or exempt.

#### **US - TSCA 12(b) Export Notification**

All the ingredients are listed or exempt.

**CTL 61 BUTTERCUP****16. Other information**

<b>General information</b>	The following are the top 5 materials by weight listed for New Jersey (if applicable):- Water 7732-18-5, Non Lead Frit65997-18-4, Hydrated Aluminum Silicate1332-58-7, Calcium Silicate 13983-17-0 Various Pigments
<b>Revision date</b>	7/28/2016
<b>Revision</b>	3
<b>Supersedes date</b>	7/27/2016
<b>SDS No.</b>	5010

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## **SAFETY DATA SHEET**

### **CRYSTALTEX GLAZES (LEAD) – CTL SERIES (3)**

Mfg. American Art & Clay Co.

SDS's for the following Glazes:

CTL 30 SINGED MAPLE

CTL 54 FIRECRACKER

## SAFETY DATA SHEET CTL 30 SINGED MAPLE

### 1. Identification

#### Product identifier

Product name CTL 30 SINGED MAPLE

Product number CTL 30 SINGED MAPLE

#### Recommended use of the chemical and restrictions on use

Application ceramic glaze

#### Details of the supplier of the safety data sheet

Supplier American Art Clay Co Inc  
6060 Guion Road  
Indianapolis,  
IN 46254-1222  
USA  
Toll Free: 1-800-925-5195 ext. 1303  
Local: 1-317-243-0066 ext. 1303

#### Emergency telephone number

Emergency telephone 1 317 243 0066 ext. 1303 Mon-Fri, 0900-1700 EST

### 2. Hazard(s) identification

#### Classification of the substance or mixture

Physical hazards Not Classified

Health hazards Not Classified

#### Label elements

Hazard statements NC Not Classified

#### Other hazards

none present

### 3. Composition/information on ingredients

#### Mixtures

Composition comments Only ingredients listed above are notifiable for this product. If none are shown then all ingredients are exempt.

### 4. First-aid measures

#### Description of first aid measures

General information --

Ingestion Do not induce vomiting. Rinse mouth thoroughly with water. Give a few small glasses of water or milk to drink. Get medical attention if any discomfort continues.

Skin Contact Wash skin thoroughly with soap and water.

Eye contact Rinse with water.

#### Most important symptoms and effects, both acute and delayed

Inhalation Read Section 2 for any specific precautions associated with this product. In general, breathing any type of dust / mist can and may aggravate irritation of the throat and lungs.



## CTL 30 SINGED MAPLE

<b>Ingestion</b>	Read Section 2 for any specific precautions associated with the use of this product. Products with specific warnings about ingestion will give guidance there.
<b>Skin contact</b>	Read Section 2 for any specific precautions associated with the use of this product. In general most ceramic glazes, clays and special products will tend to have a drying effect on the skin and may cause some sensitivity to users with sensitive skin.
<b>Eye contact</b>	Read Section 2 for any specific precautions associated with the use of this product. In general most ceramic and special products contain materials that maybe abrasive to eyes. Keeping materials from contacting the eyes is prudent. If contact does occur, flush with clean water, do not rub.

### Indication of immediate medical attention and special treatment needed

**Notes for the doctor** Treat symptomatically.

### 5. Fire-fighting measures

#### Extinguishing media

**Suitable extinguishing media** Use fire-extinguishing media suitable for the surrounding fire.

#### Special hazards arising from the substance or mixture

**Specific hazards** The product is not believed to present a hazard due to its physical nature.

#### Advice for firefighters

**Special protective equipment for firefighters** Use protective equipment appropriate for surrounding materials.

### 6. Accidental release measures

#### Personal precautions, protective equipment and emergency procedures

**Personal precautions** For personal protection, see Section 8.

#### Environmental precautions

**Environmental precautions** Please read Section 2 completely. If any environmental warnings such as; H411 or H412 are listed in Section 2, please use appropriate procedures when disposing of product and container. Do not put materials into waterways or sewers.

#### Methods and material for containment and cleaning up

**Methods for cleaning up** Collect spillage for reclamation or absorb in vermiculite, dry sand or similar material

**Reference to other sections** For waste disposal, see Section 13. For personal protection, see Section 8.

### 7. Handling and storage

#### Precautions for safe handling

**Usage precautions** Read label before use. Do not eat, drink or smoke when using this product. Good personal hygiene procedures should be implemented. Wash hands and any other contaminated areas of the body with soap and water before leaving the work site.

#### Conditions for safe storage, including any incompatibilities

**Storage precautions** Store in tightly-closed, original container in a dry and cool place.

#### Specific end uses(s)

**Specific end use(s)** The identified uses for this product are detailed in Section 1.2.

### 8. Exposure Controls/personal protection

## CTL 30 SINGED MAPLE

### Control parameters

**Ingredient comments** Only ingredients listed in Section 3 are notifiable for this product. If none are shown then all ingredients are exempt.

### Exposure controls

**Appropriate engineering controls** No specific ventilation requirements unless the "FAN" pictogram is shown above or specified in Section 2.

**Eye/face protection** No specific eye protection required unless the "EYE PROTECTION" pictogram is shown above or specified in Section 2.

**Hand protection** No specific hand protection required unless the "HAND PROTECTION" pictogram is shown above or specified in Section 2.

**Hygiene measures** Using good personal hygiene practices is always appropriate. Keeping a clean work space, cleaning up properly when done, and not eating, drinking or smoking when using this product.

**Respiratory protection** No specific respiratory protection required unless the "RESPIRATOR" pictogram is shown above or specified in Section 2. Using the appropriate certified protection for the operation is important if required.

## 9. Physical and Chemical Properties

### Information on basic physical and chemical properties

<b>Appearance</b>	Colored liquid.
<b>Color</b>	Various colors.
<b>Odor</b>	Almost odorless.
<b>Odor threshold</b>	No information available.
<b>pH</b>	6-8
<b>Melting point</b>	No information available.
<b>Initial boiling point and range</b>	No information available.
<b>Flash point</b>	No information available.
<b>Evaporation rate</b>	No information available.
<b>Flammability (solid, gas)</b>	No information available.
<b>Upper/lower flammability or explosive limits</b>	No information available.
<b>Vapor pressure</b>	No information available.
<b>Relative density</b>	Greater than 1.0
<b>Solubility(ies)</b>	Not applicable.
<b>Partition coefficient</b>	No information available.
<b>Auto-ignition temperature</b>	Not applicable.
<b>Decomposition Temperature</b>	No information available.
<b>Viscosity</b>	No information available.
<b>Explosive properties</b>	none
<b>Oxidizing properties</b>	none

## CTL 30 SINGED MAPLE

**Other information** Not applicable.

### 10. Stability and reactivity

**Reactivity** There are no known reactivity hazards associated with this product.

**Stability** No particular stability concerns.

**Possibility of hazardous reactions** None known.

**Conditions to avoid** None known.

**Materials to avoid** None known.

**Hazardous decomposition products** None known.

### 11. Toxicological information

#### Information on toxicological effects

**Toxicological effects** Please read Section 2 thoroughly to understand the toxicological risks, (if any) and precautions for safe use (if any).

#### Skin corrosion/Irritation

#### Skin sensitization

**Skin sensitization** Based on available data the classification criteria are not met.

**Eye contact** May cause temporary eye irritation.

### 12. Ecological Information

**Ecotoxicity** Please read Section 2 completely. If any environmental warnings such as; H411 or H412 are listed in Section 2, please use appropriate procedures when disposing of product and container. Do not put materials into waterways or sewers.

#### Toxicity

**Toxicity** Please read Section 2 completely. If any environmental warnings such as; H411 or H412 are listed in Section 2, please use appropriate procedures when disposing of product and container. Do not put materials into waterways or sewers.

#### Persistence and degradability

**Persistence and degradability** No data available.

**Biodegradation** Not inherently biodegradable.

#### Bioaccumulative potential

**Partition coefficient** No information available.

#### Mobility in soil

**Mobility** Semi-mobile.

#### Results of PBT and vPvB assessment

**Results of PBT and vPvB assessment** This product does not contain any substances classified as PBT or vPvB.

**CTL 30 SINGED MAPLE****Other adverse effects****Other adverse effects** None known.**13. Disposal considerations****Waste treatment methods****General information**

Dispose of waste product or used containers in accordance with local regulations. When handling waste, the safety precautions applying to handling of the product should be considered.

**14. Transport information****General**

This package is shipped in accordance with ADR SP375, IATA A197 & IMDG 2.10.2.7.

**UN Number**

Not applicable.

**UN proper shipping name**

Not applicable.

**Transport hazard class(es)**

No transport warning sign required.

**Packing group**

Not applicable.

**Environmental hazards****Environmentally Hazardous Substance**

Please refer to Section 2 for any environmental hazards associated with this product. If H411/H412 warnings are shown then please verify packaging and labelling requirements for larger volumes.

**Special precautions for user**

Not applicable.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not applicable.

**15. Regulatory information****International Regulations****US State Regulations****California Proposition 65 Carcinogens and Reproductive Toxins**

Known to the State of California to cause developmental and reproductive toxicity.

*lithium carb*

5-10%

**Massachusetts "Right To Know" List**

*zinc oxide*

1-5%

*Hydrated Aluminium Silicate*

1-5%

## CTL 30 SINGED MAPLE

*Rutile*

5-10%

*lithium carb*

5-10%

*2-aminoethanol*

<1%

### **Rhode Island "Right To Know" List**

*zinc oxide*

1-5%

*Hydrated Aluminium Silicate*

1-5%

*Rutile*

5-10%

*2-aminoethanol*

<1%

### **Minnesota "Right To Know" List**

*zinc oxide*

1-5%

*Hydrated Aluminium Silicate*

1-5%

*Rutile*

5-10%

*2-aminoethanol*

<1%

### **New Jersey "Right To Know" List**

*zinc oxide*

1-5%

*Hydrated Aluminium Silicate*

1-5%

*Rutile*

5-10%

*lithium carb*

5-10%

*2-aminoethanol*

<1%

### **Pennsylvania "Right To Know" List**

*zinc oxide*

1-5%

*Hydrated Aluminium Silicate*

1-5%

*Rutile*

5-10%

**CTL 30 SINGED MAPLE***2-aminoethanol*

&lt;1%

**Inventories****Canada - DSL/NDSL**

All the ingredients are listed or exempt.

**US - TSCA**

All the ingredients are listed or exempt.

**US - TSCA 12(b) Export Notification**

All the ingredients are listed or exempt.

**16. Other information**

<b>General information</b>	The following are the top 5 materials by weight listed for New Jersey (if applicable):- Water 7732-18-5, Non Lead Frit65997-18-4, Hydrated Aluminum Silicate1332-58-7, Calcium Silicate 13983-17-0 Various Pigments
<b>Revision date</b>	11/16/2016
<b>Revision</b>	5
<b>Supersedes date</b>	7/28/2016
<b>SDS No.</b>	4990

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.

## SAFETY DATA SHEET CTL 54 FIRECRACKER

### 1. Identification

#### Product identifier

Product name CTL 54 FIRECRACKER

Product number CTL 54 FIRECRACKER

#### Recommended use of the chemical and restrictions on use

Application ceramic glaze

#### Details of the supplier of the safety data sheet

Supplier American Art Clay Co Inc  
6060 Guion Road  
Indianapolis,  
IN 46254-1222  
USA  
Toll Free: 1-800-925-5195 ext. 1303  
Local: 1-317-243-0066 ext. 1303

#### Emergency telephone number

Emergency telephone 1 317 243 0066 ext. 1303 Mon-Fri, 0900-1700 EST

### 2. Hazard(s) identification

#### Classification of the substance or mixture

Physical hazards Not Classified

Health hazards Not Classified

Environmental hazards Not Classified

#### Label elements

Hazard statements NC Not Classified

#### Other hazards

none present

### 3. Composition/information on ingredients

#### Mixtures

Composition comments Only ingredients listed above are notifiable for this product. If none are shown then all ingredients are exempt.

### 4. First-aid measures

#### Description of first aid measures

General information --

Ingestion Do not induce vomiting. Rinse mouth thoroughly with water. Give a few small glasses of water or milk to drink. Get medical attention if any discomfort continues.

Skin Contact Wash skin thoroughly with soap and water.

Eye contact Rinse with water.

#### Most important symptoms and effects, both acute and delayed

## CTL 54 FIRECRACKER

<b>Inhalation</b>	Read Section 2 for any specific precautions associated with this product. In general, breathing any type of dust / mist can and may aggravate irritation of the throat and lungs.
<b>Ingestion</b>	Read Section 2 for any specific precautions associated with the use of this product. Products with specific warnings about ingestion will give guidance there.
<b>Skin contact</b>	Read Section 2 for any specific precautions associated with the use of this product. In general most ceramic glazes, clays and special products will tend to have a drying effect on the skin and may cause some sensitivity to users with sensitive skin.
<b>Eye contact</b>	Read Section 2 for any specific precautions associated with the use of this product. In general most ceramic and special products contain materials that maybe abrasive to eyes. Keeping materials from contacting the eyes is prudent. If contact does occur, flush with clean water, do not rub.

### Indication of immediate medical attention and special treatment needed

**Notes for the doctor** Treat symptomatically.

### **5. Fire-fighting measures**

#### Extinguishing media

**Suitable extinguishing media** Use fire-extinguishing media suitable for the surrounding fire.

#### Special hazards arising from the substance or mixture

**Specific hazards** The product is not believed to present a hazard due to its physical nature.

#### Advice for firefighters

**Special protective equipment for firefighters** Use protective equipment appropriate for surrounding materials.

### **6. Accidental release measures**

#### Personal precautions, protective equipment and emergency procedures

**Personal precautions** For personal protection, see Section 8.

#### Environmental precautions

**Environmental precautions** Please read Section 2 completely. If any environmental warnings such as; H411 or H412 are listed in Section 2, please use appropriate procedures when disposing of product and container. Do not put materials into waterways or sewers.

#### Methods and material for containment and cleaning up

**Methods for cleaning up** Collect spillage for reclamation or absorb in vermiculite, dry sand or similar material

**Reference to other sections** For waste disposal, see Section 13. For personal protection, see Section 8.

### **7. Handling and storage**

#### Precautions for safe handling

**Usage precautions** Read label before use. Do not eat, drink or smoke when using this product. Good personal hygiene procedures should be implemented. Wash hands and any other contaminated areas of the body with soap and water before leaving the work site.

#### Conditions for safe storage, including any incompatibilities

**Storage precautions** Store in tightly-closed, original container in a dry and cool place.

#### Specific end uses(s)

**Specific end use(s)** The identified uses for this product are detailed in Section 1.2.



## CTL 54 FIRECRACKER

### 8. Exposure Controls/personal protection

#### Control parameters

**Ingredient comments** Only ingredients listed in Section 3 are notifiable for this product. If none are shown then all ingredients are exempt.

#### Exposure controls

**Appropriate engineering controls** No specific ventilation requirements unless the "FAN" pictogram is shown above or specified in Section 2.

**Eye/face protection** No specific eye protection required unless the "EYE PROTECTION" pictogram is shown above or specified in Section 2.

**Hand protection** No specific hand protection required unless the "HAND PROTECTION" pictogram is shown above or specified in Section 2.

**Hygiene measures** Using good personal hygiene practices is always appropriate. Keeping a clean work space, cleaning up properly when done, and not eating, drinking or smoking when using this product.

**Respiratory protection** No specific respiratory protection required unless the "RESPIRATOR" pictogram is shown above or specified in Section 2. Using the appropriate certified protection for the operation is important if required.

### 9. Physical and Chemical Properties

#### Information on basic physical and chemical properties

<b>Appearance</b>	Colored liquid.
<b>Color</b>	Various colors.
<b>Odor</b>	Almost odorless.
<b>Odor threshold</b>	No information available.
<b>pH</b>	6-8
<b>Melting point</b>	No information available.
<b>Initial boiling point and range</b>	No information available.
<b>Flash point</b>	No information available.
<b>Evaporation rate</b>	No information available.
<b>Flammability (solid, gas)</b>	No information available.
<b>Upper/lower flammability or explosive limits</b>	No information available.
<b>Vapor pressure</b>	No information available.
<b>Relative density</b>	Greater than 1.0
<b>Solubility(ies)</b>	Not applicable.
<b>Partition coefficient</b>	No information available.
<b>Auto-ignition temperature</b>	Not applicable.
<b>Decomposition Temperature</b>	No information available.
<b>Viscosity</b>	No information available.
<b>Explosive properties</b>	none

**CTL 54 FIRECRACKER**

**Oxidizing properties** none

**Other information** Not applicable.

**10. Stability and reactivity**

**Reactivity** There are no known reactivity hazards associated with this product.

**Stability** No particular stability concerns.

**Possibility of hazardous reactions** None known.

**Conditions to avoid** None known.

**Materials to avoid** None known.

**Hazardous decomposition products** None known.

**11. Toxicological information****Information on toxicological effects**

**Toxicological effects** Please read Section 2 thoroughly to understand the toxicological risks, (if any) and precautions for safe use (if any).

**Skin corrosion/irritation****Skin sensitization**

**Skin sensitization** Based on available data the classification criteria are not met.

**Eye contact** May cause temporary eye irritation.

**12. Ecological Information**

**Ecotoxicity** Please read Section 2 completely. If any environmental warnings such as; H411 or H412 are listed in Section 2, please use appropriate procedures when disposing of product and container. Do not put materials into waterways or sewers.

**Toxicity**

**Toxicity** Please read Section 2 completely. If any environmental warnings such as; H411 or H412 are listed in Section 2, please use appropriate procedures when disposing of product and container. Do not put materials into waterways or sewers.

**Persistence and degradability**

**Persistence and degradability** No data available.

**Biodegradation** Not inherently biodegradable.

**Bioaccumulative potential**

**Partition coefficient** No information available.

**Mobility in soil**

**Mobility** Semi-mobile.

**Results of PBT and vPvB assessment**

## CTL 54 FIRECRACKER

**Results of PBT and vPvB assessment** This product does not contain any substances classified as PBT or vPvB.

**Other adverse effects**

**Other adverse effects** None known.

### 13. Disposal considerations

**Waste treatment methods**

**General information** Dispose of waste product or used containers in accordance with local regulations. When handling waste, the safety precautions applying to handling of the product should be considered.

### 14. Transport information

**General** The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, DoT).

**UN Number**

Not applicable.

**UN proper shipping name**

Not applicable.

**Transport hazard class(es)**

No transport warning sign required.

**Packing group**

Not applicable.

**Environmental hazards**

**Environmentally Hazardous Substance**

Please refer to Section 2 for any environmental hazards associated with this product. If H411/H412 warnings are shown then please verify packaging and labeling requirements for larger volumes.

**Special precautions for user**

Not applicable.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not applicable.

### 15. Regulatory information

**International Regulations**

**US State Regulations**

**California Proposition 65 Carcinogens and Reproductive Toxins**  
None of the ingredients are listed or exempt.

**Massachusetts "Right To Know" List**

*2-aminoethanol*  
<1%

*Hydrated Aluminium Silicate*  
1-5%

**CTL 54 FIRECRACKER****Rhode Island "Right To Know" List***2-aminoethanol*

&lt;1%

*Hydrated Aluminium Silicate*

1-5%

**Minnesota "Right To Know" List***2-aminoethanol*

&lt;1%

*Hydrated Aluminium Silicate*

1-5%

**New Jersey "Right To Know" List***2-aminoethanol*

&lt;1%

*Hydrated Aluminium Silicate*

1-5%

**Pennsylvania "Right To Know" List***2-aminoethanol*

&lt;1%

*Hydrated Aluminium Silicate*

1-5%

**Inventories****Canada - DSL/NDSL**

All the ingredients are listed or exempt.

**US - TSCA**

All the ingredients are listed or exempt.

**US - TSCA 12(b) Export Notification**

All the ingredients are listed or exempt.

**16. Other information**

<b>General information</b>	The following are the top 5 materials by weight listed for New Jersey (if applicable):- Water 7732-18-5, Non Lead Frit65997-18-4, Hydrated Aluminum Silicate1332-58-7, Calcium Silicate 13983-17-0 Various Pigments
<b>Revision date</b>	7/28/2016
<b>Revision</b>	3
<b>Supersedes date</b>	7/27/2016
<b>SDS No.</b>	5009

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.

Product Number: 871AA  
 Issuing Date: May 11, 2015

Product Name: Hydrogen Peroxide 3%  
 Revision Date: None  
 Revision Number: 0



VI·JON®

## Safety Data Sheet



The supplier identified below generated this SDS using the UL SDS template. UL did not test, certify, or approve the substance described in this SDS. and all information in this SDS was provided by the supplier or was reproduced from publicly available regulatory data sources. UL makes no representations or warranties regarding the completeness or accuracy of the information in this SDS and disclaims all liability in connection with the use of this information or the substance described in this SDS. The layout, appearance and format of this SDS is © 2014 UL LLC. All rights reserved.

### 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

**Product identifier** CVS HYDROGEN PEROXIDE 3%

**Product Name** 871AA Hydrogen Peroxide 3%

**Other means of identification**

**Synonyms** None

**Recommended use of the chemical and restrictions on use**

**Recommended Use** First Aid Antiseptic, Oral Debriding Agent

**Uses advised against** Use only as directed.

**Details of the supplier of the safety data sheet**

**Supplier Name** Vi-Jon Inc.

**Supplier Address** Vi-Jon Inc.  
8800 Page Avenue  
Saint Louis  
MO  
63114  
US

**Supplier Phone Number** Phone: 314-427-1000 (M-F 8am-4pm CST)  
Fax:3144271010

**Supplier Email** info@vijon.com

**Emergency telephone number** Chemtrec: 1-800-424-9300 (24-Hour)



Product Number: 871AA  
Issuing Date: May 11, 2015

Product Name: Hydrogen Peroxide 3%  
Revision Date: None  
Revision Number: 0

## 2. HAZARDS IDENTIFICATION

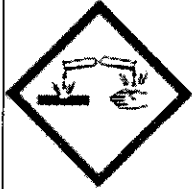
### Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 1

### GHS Label elements, including precautionary statements

#### Emergency Overview

<b>Signal word</b>  <b>Hazard Statements</b> Causes skin irritation Causes serious eye damage  	<b>Danger</b>  <b>Appearance:</b> Clear, Colorless Liquid <b>Physical State:</b> Liquid <b>Odor:</b> Ozone-like to odorless
--	---

#### Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling  
Wear protective gloves/protective clothing/eye protection/face protection

#### Precautionary Statements - Response

Specific treatment (see supplemental first aid instructions on this label)

#### Eyes

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
Immediately call a POISON CENTER or doctor/physician

#### Skin

If skin irritation occurs: Wash with plenty of soap and water  
Take off contaminated clothing and wash before reuse

#### Precautionary Statements - Storage

None

#### Precautionary Statements - Disposal

None

#### Hazards not otherwise classified (HNOC)

Not applicable

#### Unknown Toxicity

0% of the mixture consists of ingredient(s) of unknown toxicity

#### Other information

Harmful to aquatic life with long lasting effects

#### Interactions with Other Chemicals

No information available.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%	Trade Secret
Hydrogen Peroxide (Stabilized) 3%	7722-84-1	0 - 10	*
Purified Water	7732-18-5	50 - 100	*

\*The exact percentage (concentration) of composition has been withheld as a trade secret



#### 4. FIRST AID MEASURES

##### First aid measures

##### General Advice

Show this safety data sheet to the doctor in attendance. Immediate medical attention is required.

##### Eye Contact

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Remove contact lenses, if present and easy to do. Continue rinsing. Do not rub affected area. Seek immediate medical attention/advice.

##### Skin Contact

In the case of skin irritation or allergic reactions, wash off immediately with soap and plenty of water for at least 15 minutes. Get medical attention if irritation persists.

##### Inhalation

Remove to fresh air. Get medical attention immediately if symptoms occur.

##### Ingestion

Rinse mouth immediately and drink plenty of water. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Call a physician.

##### Self-protection of the first aider

Avoid contact with skin, eyes or clothing. Use personal protective equipment as required. Wear personal protective clothing (see section 8).

##### Most important symptoms and effects, both acute and delayed

**Most Important Symptoms and Effects** Burning sensation.

##### Indication of any immediate medical attention and special treatment needed

**Notes to Physician** Treat symptomatically.

#### 5. FIRE-FIGHTING MEASURES

##### Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

##### Unsuitable extinguishing media

CAUTION: Use of water spray when fighting fire may be inefficient.

##### Specific Hazards Arising from the Chemical

No information available.

**Uniform Fire Code** Irritant: Liquid

##### Hazardous Combustion Products

Carbon oxides.

##### Explosion Data

**Sensitivity to Mechanical Impact** No.

**Sensitivity to Static Discharge** No.

##### Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

## 6. ACCIDENTAL RELEASE MEASURES

### Personal precautions, protective equipment and emergency procedures

**Personal Precautions** Avoid contact with eyes and clothing. Ensure adequate ventilation. Use personal protective equipment as required.

**Other Information** Refer to protective measures listed in Sections 7 and 8.

### Environmental Precautions

**Environmental Precautions** Refer to protective measures listed in Sections 7 and 8. Prevent further leakage or spillage if safe to do so.

### Methods and material for containment and cleaning up

**Methods for Containment** Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up** Soak up with inert absorbent material. Pick up and transfer to properly labeled containers.

## 7. HANDLING AND STORAGE

### Precautions for safe handling

**Handling** Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash before reuse.

### Conditions for safe storage, including any incompatibilities

**Storage** Keep containers tightly closed in a dry, cool and well-ventilated place. Store locked up. Keep out of the reach of children.

**Incompatible Products** Strong acids. Strong oxidizing agents. Strong bases.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

**Exposure Guidelines** There is no exposure data pertaining to the Product. This section reflects exposure data pertaining to individual ingredients.

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Hydrogen Peroxide 3% 7722-84-1	TWA: 1 ppm	TWA: 1 ppm TWA: 1.4 mg/m <sup>3</sup> (vacated) TWA: 1 ppm (vacated) TWA: 1.4 mg/m <sup>3</sup>	IDLH: 75 ppm TWA: 1 ppm TWA: 1.4 mg/m <sup>3</sup>

ACGIH TLV: American Conference of Governmental Industrial Hygienists - Threshold Limit Value OSHA PEL: Occupational Safety and Health Administration - Permissible Exposure Limits Immediately Dangerous to Life or Health

**Other Exposure Guidelines** Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992) See section 15 for national exposure control parameters

### Appropriate engineering controls

**Engineering Measures** Showers  
Eyewash stations  
Ventilation systems

### Individual protection measures, such as personal protective equipment

**Eye/Face Protection** Tight sealing safety goggles.

**Skin and Body Protection** Wear protective gloves and protective clothing. Long sleeved clothing. Impervious gloves.

**Respiratory Protection** No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

**Hygiene Measures** Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product.





## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Physical and Chemical Properties

Physical State	Liquid	Odor	Ozone-like to Odorless
Appearance	Clear, Colorless Liquid	Odor Threshold	No information available
Color	Colorless		
<b>Property</b>	<b>Values</b>	<b>Remarks</b>	<b>Method</b>
pH	4.5	None known	
Melting / freezing point	No data available	None known	
Boiling point / boiling range	No data available	None known	
Flash Point	No data available	None known	
Evaporation Rate	No data available	None known	
Flammability (solid, gas)	No data available	None known	
Flammability Limit in Air			
Upper flammability limit	No data available		
Lower flammability limit	No data available		
Vapor pressure	No data available	None known	
Vapor density	No data available	None known	
Specific Gravity	No data available	None known	
Water Solubility	Miscible in water	None known	
Solubility in other solvents	No data available	None known	
Partition coefficient: n-octanol/water	No data available	None known	
Autoignition temperature	No data available	None known	
Decomposition temperature	No data available	None known	
Kinematic viscosity	No data available	None known	
Dynamic viscosity	No data available	None known	
Explosive properties	No data available		
Oxidizing Properties	No data available		
<b>Other Information</b>			
Softening Point	No data available		
VOC Content (%)	No data available		
Particle Size	No data available		
Particle Size Distribution	No data available		

## 10. STABILITY AND REACTIVITY

### Reactivity

No data available.

### Chemical stability

Stable under recommended storage conditions.

### Possibility of Hazardous Reactions

None under normal processing.

### Hazardous Polymerization

Hazardous polymerization does not occur.

### Conditions to avoid

None known based on information supplied.

### Incompatible materials

Strong acids. Strong oxidizing agents. Strong bases.

### Hazardous Decomposition Products

Carbon oxides.

When used in accordance with the directions.



Product Number: 871AA  
Issuing Date: May 11, 2015

Product Name: Hydrogen Peroxide 3%  
Revision Date: None  
Revision Number: 0

## 11. TOXICOLOGICAL INFORMATION

### Information on likely routes of exposure

#### Product Information

**Inhalation** Specific test data for the substance or mixture is not available.  
**Eye Contact** Specific test data for the substance or mixture is not available.  
**Skin Contact** Specific test data for the substance or mixture is not available.  
**Ingestion** Specific test data for the substance or mixture is not available.

#### Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Hydrogen Peroxide (Stabilized) 3% 7722-84-1	= 801 mg/kg ( Rat )	= 4060 mg/kg ( Rat ) = 2000 mg/kg ( Rabbit )	= 2 g/m <sup>3</sup> ( Rat ) 4 h
Purified Water 7732-18-5	> 90 mL/kg ( Rat )	-	-

### Information on toxicological effects

**Symptoms** May cause skin redness. May cause redness and tearing of the eyes. May cause blindness. Burning.

### Delayed and immediate effects as well as chronic effects from short and long-term exposure

**Sensitization** No information available.  
**Mutagenic Effects** No information available.  
**Carcinogenicity** The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical Name	ACGIH	IARC	NTP	OSHA
Hydrogen Peroxide (Stabilized) 3% 7722-84-1	A3	Group 3		

*ACGIH (American Conference of Governmental Industrial Hygienists)*

*A3 - Animal Carcinogen*

*IARC (International Agency for Research on Cancer)*

*Group 3 - Not Classifiable as to Carcinogenicity in Humans*

**Reproductive Toxicity** No information available.  
**STOT - single exposure** No information available.  
**STOT - repeated exposure** No information available.  
**Chronic Toxicity** No known effect based on information supplied.  
**Target Organ Effects** Respiratory system. Eyes. Skin. Blood. Lungs.  
**Aspiration Hazard** No information available.

### Numerical measures of toxicity Product Information

The following values are calculated based on chapter 3.1 of the GHS document

**ATEmix (oral)**  
26,700.00 mg/kg  
**ATEmix (dermal)**  
66,667.00 mg/kg (ATE)  
**ATEmix (inhalation-dust/mist)**  
67.00 mg/l  
**ATEmix (inhalation-vapor)**  
367.00 ATEmix



Product Number: 871AA  
Issuing Date: May 11, 2015

Product Name: Hydrogen Peroxide 3%  
Revision Date: None  
Revision Number: 0

## 12. ECOLOGICAL INFORMATION

There is no ecological data on the Product. The Product ingredients are expected to be safe for the environment at concentrations predicted under normal use and accidental spill scenarios. Packaging components are compatible with the conventional solid waste management practices.

### Ecotoxicity

No information available.

### Persistence and Degradability

No information available.

### Bioaccumulation

No information available

### Other adverse effects

No information available.

## 13. DISPOSAL CONSIDERATIONS

### Waste treatment methods

#### **Disposal methods**

This material, as supplied, is not a hazardous waste according to Federal regulations (40 CFR 261). This material could become a hazardous waste if it is mixed with or otherwise comes in contact with a hazardous waste, if chemical additions are made to this material, or if the material is processed or otherwise altered. Consult 40 CFR 261 to determine whether the altered material is a hazardous waste. Consult the appropriate state, regional, or local regulations for additional requirements.

#### **Contaminated Packaging**

Dispose of contents/containers in accordance with local regulations.

**California Hazardous Waste Codes** 311

## 14. TRANSPORT INFORMATION

<u>DOT</u>	Not Regulated
Proper Shipping Name	Not Regulated
Hazard Class	N/A
<u>TDG</u>	Not Regulated
<u>MEX</u>	Not Regulated
<u>ICAO</u>	Not Regulated
<u>IATA</u>	Not Regulated
Proper Shipping Name	Not Regulated
Hazard Class	N/A
<u>IMDG/IMO</u>	Not Regulated
Hazard Class	N/A
<u>RID</u>	Not Regulated
<u>ADR</u>	Not Regulated
<u>ADN</u>	Not Regulated



Product Number: 871AA  
Issuing Date: May 11, 2015

Product Name: Hydrogen Peroxide 3%  
Revision Date: None  
Revision Number: 0

## 15. REGULATORY INFORMATION

### International Inventories

TSCA Complies  
DSL All components are listed either on the DSL or NDSL.  
TSCA - United States Toxic Substances Control Act Section 8(b) Inventory  
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

### US Federal Regulations

#### SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

#### SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	No
Fire Hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

#### CWA (Clean Water Act)

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Hydrogen Peroxide (Stabilized) 3% 7722-84-1	X	X	X	X

#### CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical Name	Hazardous Substances RQs	Extremely Hazardous Substances RQs	RQ
Hydrogen Peroxide (Stabilized) 3% 7722-84-1		1000 lb	

### US State Regulations

#### California Proposition 65 - NONE

This product does not contain any Proposition 65 chemicals.

#### U.S. State Right-to-Know Regulations

US State Regulations. .

Chemical Name	New Jersey	Massachusetts	Pennsylvania	Rhode Island	Illinois
Hydrogen Peroxide (Stabilized) 3% 7722-84-1	X	X	X	X	



Product Number: 871AA  
Issuing Date: May 11, 2015

Product Name: Hydrogen Peroxide 3%  
Revision Date: None  
Revision Number: 0

### International Regulations

#### Mexico

#### National occupational exposure limits

Component	Carcinogen Status	Exposure Limits
Hydrogen Peroxide (Stabilized) 3% 7722-84-1 ( 0 - 10 )	A3	Mexico: TWA 1 ppm Mexico: TWA 1.5 mg/m <sup>3</sup> Mexico: STEL 2 ppm Mexico: STEL 3 mg/m <sup>3</sup>

Mexico - Occupational Exposure Limits - Carcinogens  
A3 - Confirmed Animal Carcinogen

#### Canada

#### WHMIS Hazard Class

D2B



### 16. OTHER INFORMATION

NFPA	Health Hazards 1	Flammability 0	Instability 0	Physical and Chemical Hazards - NONE
HMIS	Health Hazards 3	Flammability 0	Physical Hazard 0	Personal Protection X

Prepared By WERCS Professional Services, LLC  
23 British American Blvd.  
Latham, NY 12110  
1-800-572-6501

Issuing Date May 11, 2015  
Revision Date None  
Revision Note None

#### General Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

Approved and Updated by Vi-Jon, Inc.

#### Disclaimer:

The information and recommendations contained in the Safety Data Sheet (SDS) are supplied pursuant to 29 CFR 1910.1200 of the Occupational Safety and Health Standards Hazard Communication Rule. The information and recommendations set forth herein are presented in good faith and believed to be correct as of this date hereof.

Vi-Jon, however, makes no representation as to the completeness or accuracy thereof, and information is supplied upon the express condition that the persons receiving the information will be required to make their own determination as to its suitability for their purposes prior to use. In no event will Vi-Jon be responsible for any damages of any nature whatsoever resulting from the use of, reliance upon, or the misuse of this information.

No representations or warranties, either expressed or implied, of merchantability, fitness for a particular purpose, or of any other nature, are made hereunder with respect to information or the product to which the information refers. The information as supplied herein is simply to be informative and intended solely to alert the user of the substance which is the subject matter of this SDS. The ultimate compliance with federal, state or local regulations concerning the use of this compound, or compliance with respect to product liability, rests solely upon the purchaser thereof.

End of Safety Data Sheet



Product Number: A00AA  
Issuing Date: August 13, 2015

Revision Date: None

Product Name: Isopropyl Alcohol 99%  
Revision Number: 0



# VI·JON<sup>®</sup> Safety Data Sheet

## 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

**Product identifier** CVS ISOPROPYL ALCOHOL

**Product Name:** Isopropyl Alcohol 99%

**Item Number:** A00AA

**Other means of identification**

**Synonyms:** None

**Recommended use of the chemical and restrictions on use**

**Recommended Use:** First Aid

**Uses advised against:** Use only as directed.

**Details of the supplier of the safety data sheet**

**Supplier Address**

Vi-Jon Inc.  
8800 Page Avenue  
Saint Louis  
MO  
63114  
US  
Phone: 314-427-1000 (M-F 8am-4pm CST)  
Fax:3144271010

**Emergency telephone number** Chemtrec: 1-800-424-9300 (24-Hour)

Product Number: A00AA  
Issuing Date: August 13, 2015

Revision Date: None

Product Name: Isopropyl Alcohol 99%  
Revision Number: 0

## 2. HAZARDS IDENTIFICATION

### Classification

This product contains a chemical or chemicals considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.122).

Serious eye damage/eye irritation	Category 2A
Specific target organ toxicity (single exposure)	Category 3
Flammable liquids	Category 2

### GHS Label elements, including precautionary statements

#### Emergency Overview

Signal word:

Danger

#### Hazard statements

May cause drowsiness or dizziness  
Causes serious eye irritation  
Highly flammable liquid and vapor



Appearance: Clear, Colorless, Water thin liquid

Physical State: Water thin liquid

Odor: Alcohol

#### Precautionary Statements - Prevention

Wear protective gloves/protective clothing/eye protection/face protection  
Avoid breathing fume/gas/mist/vapors/spray  
Use only outdoors or in a well-ventilated area  
Keep away from heat/sparks/open flames/hot surfaces. - No smoking  
Keep container tightly closed  
Ground/bond container and receiving equipment  
Use explosion-proof electrical/ventilating/lighting/equipment  
Use only non-sparking tools  
Take precautionary measures against static discharge

#### Precautionary Statements - Response

No information available.

#### Eyes

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
If eye irritation persists: Get medical advice/attention.

#### Inhalation

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.  
Call a POISON CENTER or doctor/physician if you feel unwell.

#### Fire

In case of fire: Use CO2, dry chemical, or foam for extinction.

#### Precautionary Statements - Storage

Store in a well-ventilated place. Keep container tightly closed.  
Store locked up.

Product Number: A00AA  
Issuing Date: August 13, 2015

Revision Date: None

Product Name: Isopropyl Alcohol 99%  
Revision Number: 0

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant.

**Hazards not otherwise classified (HNOC)**

Not Applicable

**Unknown Toxicity**

0% of the mixture consists of ingredient(s) of unknown toxicity

**Other information**

May be harmful if swallowed

May be harmful if inhaled

Prolonged or repeated contact may dry skin and cause irritation

**Interactions with Other Chemicals**

No information available

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

Chemical Name	CAS-No	Weight %	Trade Secret
Isopropyl Alcohol	67-63-0	50-100	*
Water	7732-18-5	0-10	*

\* The exact percentage (concentration) of composition has been withheld as a trade secret

**4. FIRST AID MEASURES**

**First aid measures**

**Eye Contact**

In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.

**Skin Contact**

In the case of skin irritation or allergic reactions see a physician.

**Inhalation**

Move victim to fresh air. Apply artificial respiration if victim is not breathing. Administer oxygen if breathing is difficult.

**Ingestion**

Do NOT induce vomiting. Clean mouth with water and afterwards drink plenty of water. Never give anything by mouth to an unconscious person. Consult a physician.

**Protection of First-aiders**

Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

**Most important symptoms and effects, both acute and delayed**

**Most Important Symptoms/Effects**

Eye irritation. Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting

**Indication of any immediate medical attention and special treatment needed**

**Notes to Physician**

Keep victim warm and quiet. Effects of exposure (inhalation, ingestion or skin contact) to substance may be delayed.



## 5. FIRE-FIGHTING MEASURES

### Suitable Extinguishing Media

Dry chemical, CO<sub>2</sub>, water spray, fog or alcohol-resistant foam.

### Unsuitable Extinguishing Media

CAUTION: This product has a very low flash point. Use of water spray when fighting fire may be inefficient. Do not use straight streams.

### Specific Hazards Arising from the Chemical

Vapors may form explosive mixtures with air. Vapors may travel to source of ignition and flash back. Most vapors are heavier than air. They will spread along ground and collect in low or confined areas (sewers, basements, tanks). Vapor explosion hazard indoors, outdoors or in sewers. Runoff to sewer may create fire or explosion hazard.

<b>Uniform Fire Code</b>	Flammable Liquid: I-B Irritant: Liquid
--------------------------	---

### Hazardous Combustion Products

Carbon oxides.

### Explosion Data

**Sensitivity to Mechanical Impact** No

**Sensitivity to Static Discharge** Yes

### Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Move containers from fire area if you can do it without risk.

## 6. ACCIDENTAL RELEASE MEASURES

### Personal precautions, protective equipment and emergency procedures

**Personal Precautions** ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). All equipment used when handling the product must be grounded. Ventilate area with explosion-proof equipment. Do not touch or walk through spilled material. Stop leak if you can do it without risk.

**Other Information** Water spray may reduce vapor; but may not prevent ignition in closed spaces.

### Environmental precautions

**Environmental Precautions** Prevent entry into waterways, sewers, basements or confined areas.

### Methods and material for containment and cleaning up

**Methods for Containment** A vapor suppressing foam may be used to reduce vapors. Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers.

**Methods for Cleaning Up** Soak up with inert absorbent material. Use clean non-sparking tools to collect absorbed material and transfer to properly labeled containers. Keep in suitable and closed containers for disposal.

## 7. HANDLING AND STORAGE

### Precautions for safe handling

**Handling** Handle in accordance with good industrial hygiene and safety practice. Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Avoid breathing vapors or mists. Keep away from heat, sparks and open flame. No smoking.

### Conditions for safe storage, including any incompatibilities

**Storage** Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat and sources of ignition. Keep in properly labeled containers. Do not store near combustible materials. Keep in an area equipped with sprinklers

**Incompatible Products** Strong oxidizing agents. Acids. Chlorinated compounds.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

#### Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Isopropyl Alcohol 67-63-0	STEL: 400 ppm TWA: 200 ppm	TWA: 400 ppm TWA: 980 mg/m <sup>3</sup> (vacated) TWA: 400 ppm (vacated) TWA: 980 mg/m <sup>3</sup> (vacated) STEL: 500 ppm (vacated) STEL: 1225 mg/m <sup>3</sup>	IDLH: 2000 ppm 10% LEL TWA: 980 mg/m <sup>3</sup> TWA: 400 ppm STEL: 500 ppm STEL: 1225 mg/m <sup>3</sup>

ACGIH TLV: American Conference of Governmental Industrial Hygienists - Threshold Limit Value. OSHA PEL: Occupational Safety and Health Administration - Permissible Exposure Limits. NIOSH IDLH: Immediately Dangerous to Life or Health.

**Other Exposure Guidelines** Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992). See section 15 for national exposure control parameters.

### Appropriate engineering controls

**Engineering Measures** Showers  
Eyewash stations  
Ventilation systems

### Individual protection measures, such as personal protective equipment

**Eye/Face Protection** Tightly fitting safety goggles.

**Skin and Body Protection** Wear protective gloves/clothing. Antistatic boots

**Respiratory Protection** No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

**Hygiene Measures** Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke when using this product. Contaminated work clothing should not be allowed out of the workplace. Provide regular cleaning of equipment, work area and clothing. Wash hands before breaks and immediately after handling the product.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

#### Physical and Chemical Properties

Physical State	Water thin liquid	Odor	Alcohol
Appearance	Clear, Colorless, Water thin liquid	Odor Threshold	No information available
Color	Colorless	Remarks/ Method	
<b>Property</b>	<b>Values</b>		
pH	No data available	None known	
Melting/freezing point	No data available	None known	
Boiling Point/Range	No data available	None known	
Flash Point	12C / 54F	None known	
Evaporation rate	No data available	None known	
Flammability (solid, gas)	No data available	None known	
Flammability Limits in Air			
Upper flammability limit	No data available		
Lower flammability limit	No data available		
Vapor pressure	No data available	None known	
Vapor density	No data available	None known	
Specific Gravity	No data available	None known	
Water Solubility	Miscible with water	None known	
Solubility in other solvents	No data available	None known	
Partition coefficient: n-octanol/water		None known	
Autoignition temperature	No data available	None known	
Decomposition temperature	No data available	None known	
Kinematic viscosity	No data available	None known	
Dynamic viscosity		None known	
Explosive Properties	No data available		
Oxidizing Properties	No data available		
<b>Other Information</b>			
Softening Point	No data available		
VOC Content (%)	No data available		
Particle Size	No data available		
Particle Size Distribution	No data available		

### 10. STABILITY AND REACTIVITY

#### Reactivity

No data available.

#### Chemical stability

Stable under recommended storage conditions.

#### Possibility of Hazardous Reactions

None under normal processing.

#### Hazardous Polymerization

Hazardous polymerization does not occur.

#### Conditions to avoid

Heat, flames and sparks.

#### Incompatible materials

Strong oxidizing agents. Acids. Chlorinated compounds.

#### Hazardous Decomposition Products

Carbon oxides.

When used in accordance with the directions.

**11. TOXICOLOGICAL INFORMATION**

There is no data for this product. The information included in this section describes the potential hazards of the individual ingredients.

**Information on likely routes of exposure**

**Product Information**

- Inhalation May cause drowsiness and dizziness.
- Eye Contact Irritating to eyes.
- Skin Contact There is no data available for this product.
- Ingestion There is no data available for this product.

**Component Information**

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Isopropyl Alcohol 67-63-0	= 4396 mg/kg ( Rat )	= 12800 mg/kg ( Rabbit )	= 16000 ppm ( Rat ) 8 h

**Information on toxicological effects**

**Symptoms** Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Sensitization** No information available.  
**Mutagenic Effects** No information available.

**Carcinogenicity** The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical Name	ACGIH	IARC	NTP	OSHA
Isopropyl Alcohol 67-63-0		Group 3		X

*IARC: (International Agency for Research on Cancer)  
 Group 3 - Not Classifiable as to Carcinogenicity in Humans  
 OSHA: (Occupational Safety & Health Administration)  
 X - Present*

- Reproductive Toxicity** No information available.
- STOT - single exposure** No information available.
- STOT - repeated exposure** No information available.
- Chronic Toxicity** No known effect based on information supplied.
- Target Organ Effects** Eyes. Respiratory system. Skin. Central nervous system (CNS).
- Aspiration Hazard** No information available.

**Numerical measures of toxicity Product Information**

The following values are calculated based on chapter 3.1 of the GHS document

- ATEmix (oral)**  
4,440.00 mg/kg
- ATEmix (dermal)**  
12,929.00 mg/kg (ATE)
- ATEmix (inhalation-dust/mist)**  
16,162.00ATEmix

Product Number: A00AA  
Issuing Date: August 13, 2015

Revision Date: None

Product Name: Isopropyl Alcohol 99%  
Revision Number: 0

## 12. ECOLOGICAL INFORMATION

There is no ecological data on the Product. The Product ingredients are expected to be safe for the environment at concentrations predicted under normal use and accidental spill scenarios. Packaging components are compatible with the conventional solid waste management practices.

### Ecotoxicity

No information available.

### Persistence and Degradability

No information available.

### Bioaccumulation

No information available.

### Other Adverse Effects

No information available.

## 13. DISPOSAL CONSIDERATIONS

### Waste treatment methods

**Waste Disposal Methods** This material, as supplied, is not a hazardous waste according to Federal regulations (40 CFR 261).

**Contaminated Packaging** Dispose of in accordance with local regulations.

**US EPA Waste Number** D001

**California Hazardous Waste Codes** 212

This product contains one or more substances that are listed with the State of California as a hazardous waste.

Chemical Name	California Hazardous Waste
Isopropyl Alcohol 67-63-0	Toxic Ignitable

Product Number: A00AA  
Issuing Date: August 13, 2015

Revision Date: None

Product Name: Isopropyl Alcohol 99%  
Revision Number: 0

## 14. TRANSPORT INFORMATION

**DOT**  
Proper Shipping Name CONSUMER COMMODITY  
Hazard Class ORM-D  
Description CONSUMER COMMODITY, ORM-D  
Emergency Response Guide Number 129

**TDG**  
UN-No. UN1219  
Proper Shipping Name ISOPROPANOL  
Hazard Class 3  
Packing Group II  
Description UN1219, ISOPROPANOL, 3, II

**MEX**  
UN-No. UN1219  
Proper Shipping Name ISOPROPANOL  
Hazard Class 3  
Packing Group II  
Description UN1219 ISOPROPANOL, 3, II

**ICAO**  
UN-No. UN1219  
Proper Shipping Name ISOPROPANOL  
Hazard Class 3  
Packing Group II  
Description UN1219, ISOPROPANOL, 3, II

**IATA**  
UN-No. UN1219  
Proper Shipping Name ISOPROPANOL  
Hazard Class 3  
Packing Group II  
Description UN1219, ISOPROPANOL, 3, II

**IMDG/IMO**  
UN-No. UN1219  
Proper Shipping Name ISOPROPANOL  
Hazard Class 3  
Packing Group II  
EmS-No. F-E, S-D  
Description UN1219, ISOPROPANOL, 3, II, FP -11C

**RID**  
UN-No. UN1219  
Proper Shipping Name ISOPROPANOL  
Hazard Class 3  
Packing Group II  
Classification code F1  
Description UN1219 ISOPROPANOL, 3, II

**ADR**  
UN-No. UN1219  
Proper Shipping Name ISOPROPANOL  
Hazard Class 3  
Packing Group II  
Classification code F1  
Description UN1219 ISOPROPANOL, 3, II

**ADN**  
UN-No. UN1219  
Proper Shipping Name ISOPROPANOL  
Hazard Class 3  
Packing Group II  
Classification code F1  
Special Provisions 601  
Description UN1219 ISOPROPANOL, 3, II  
Hazard Labels 3  
Limited Quantity 1 L  
Ventilation VE01

Product Number: A00AA  
Issuing Date: August 13, 2015

Revision Date: None

Product Name: Isopropyl Alcohol 99%  
Revision Number: 0

## 15. REGULATORY INFORMATION

### International Inventories

TSCA Exempt  
DSL All components are listed either on the DSL or NDSL.

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory  
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

### U.S. Federal Regulations

#### SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

#### SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	No
Fire Hazard	Yes
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

#### Clean Water Act

This product does not contain any ingredients regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

#### CERCLA

This material, as supplied, does not contain any ingredients regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302).

### U.S. State Regulations

#### California Proposition 65 - NONE

This product does not contain any Proposition 65 chemicals.

#### U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania	Rhode Island	Illinois
Isopropyl Alcohol 67-63-0	X	X	X	X	

### International Regulations

Mexico - Grade No information available.

#### National occupational exposure limits

Chemical Name	Carcinogen Status	Exposure Limits
Isopropyl Alcohol		Mexico: TWA 400 ppm Mexico: TWA 980 mg/m <sup>3</sup> Mexico: STEL 500 ppm Mexico: STEL 1225 mg/m <sup>3</sup>

Canada

WHMIS Hazard Class

B2  
D2B



Product Number: A00AA  
Issuing Date: August 13, 2015

Revision Date: None

Product Name: Isopropyl Alcohol 99%  
Revision Number: 0

### 16. OTHER INFORMATION

<b>NFPA</b>	Health Hazard 2	Flammability 4	Instability 0	Physical and Chemical Hazards - None
<b>HMIS</b>	Health Hazard 2	Flammability 4	Physical Hazard 0	Personal Protection X

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Issuing Date August 13, 2015

Revision Date None

Revision Note None

**General Disclaimer**

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Approved and Updated by Vi-Jon, Inc.

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End of Safety Data Sheet