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# Safety Data Sheet

## (SDS)

**Creation Date:2020/04/27**

**Revision Date:2020/04/27**

**Version:20200427**

**Prepared according to UN GHS (the 8th revised edition)**

**Product Name: HAND SANITIZER GEL**

**Model: RRS-HS8/RRS-HS16; 8OZ/16OZ**

**Company Name: SUPPLYAID RAPID RESPONSE LLC**

**Written by TJTest Technology (Shanghai) Co., Ltd.**

## 1、 Identification of the chemical and supplier

### 1.1 Product identifier

**Product Name:** HAND SANITIZER GEL

**Product Model:** RRS-HS8/RRS-HS16;8OZ/16OZ

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

**Relevant identified uses:** Disinfection.

**Uses advised against:** Please consult manufacturer.

## 2、 Hazards identification

### 2.1 Hazard classification according to GHS:

Flammable liquid, Category 2

### 2.2 Label elements



**Hazard pictograms:**

**Signal word:** **Danger**

### 2.3 Hazard statements:.

H225 Flammable liquid.

### 2.4 Precautionary statements

#### 2.4.1 Prevention

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

#### 2.4.2 Response

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. If you wear contact lenses and can easily remove them, take out the contact lenses. Continue to rinse.

#### 2.4.3 Storage

P403+P235 Store in a well ventilated area. Keep it cool.

#### 2.4.4 Disposal

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

### 2.5 Hazard description

#### 2.5.1 Physical and chemical hazards

Flammable liquid.

### 2.5.2 Health hazards

No data available

### 2.5.3 Environmental hazards

Please refer to 12th chapter of SDS.

## 3、Composition/information on ingredients

Substance ☐ Preparation

Component	CAS No.	Concentration (volume percent, %)
Ethyl alcohol	64-17-5	80
Glycerol	56-81-5	0.7
Aloe extract	85507-69-3	0.07
Sodium hyaluronate	9067-32-7	0.0002
Acrylic acid ploymers	9007-20-9	0.3
Trolamine	102-71-6	0.2
Purified water	7732-18-5	18.7293
Denatonium	3734-33-6	0.0005

## 4、First aid measures

### 4.1 Description of first aid measures

**General advice:** Immediate medical attention is required. Show this safety data sheet (SDS) to the doctor in attendance.

**Skin contact:** Wash off with plenty of water, take off contaminated clothing and shoes immediately.

**Eye contact:** Wash with running water or saline, Seek medical attention if necessary.

**Inhalation:** Move to fresh air, Keep the airway open, Seek medical attention if you feel unwell.

**Intake:** Clean up the mouth, induce vomiting, seek medical attention.

**Protecting of first-aiders:** Ensure that medical personnel are aware of the substance involve  
d. Take precautions to protect themselves and prevent spread of contamination.

### 4.2 Indication of any immediate medical attention and special treatment needed

- 1、Treat symptomatically.
- 2、Symptoms may be delayed.

## 5、Firefighting measures

### 5.1 Extinguishing media

**1、Suitable extinguishing media:** Misty water, alcohol-resistant foam, dry powder, carbon dioxide, sand.

**2、Unsuitable extinguishing media:** Do not use a solid water stream as it may scatter or spread fire.

### 5.2 Specific hazards arising from the substance or mixture

- 1、No data available.

### 5.3 Advice for firefighters

- 1、As in any fire, wear self-contained breathing apparatus (MSHA/NIOSH approved or

equivalent) and full protective gear.

- 2、 Fight fire from a safe distance, with adequate cover.
- 3、 Prevent fire extinguishing water from contaminating surface water or the ground water system.

## **6、 Accidental release measures**

### **6.1 Personal precautions, protective equipment and emergency procedures**

- 1、 Emergency personnel wear positive pressure self-contained breathing apparatus. Wear protective and anti-static clothing. Wear chemical impermeable gloves.
- 2、 Ensure adequate ventilation. Remove all sources of ignition.
- 3、 Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.
- 4、 Use personal protective equipment. Avoid breathing vapours, mist, gas or dust.

### **6.2 Environmental precautions**

- 1、 Prevent further leakage or spillage if safe to do so.
- 2、 Discharge into the environment must be avoided.

### **6.3 Methods and materials for containment and cleaning up**

- 1、 Adhered or collected material should be promptly disposed of, in accordance with appropriate laws and regulations.
- 2、 Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment.

## **7、 Handling and storage**

### **7.1 Precautions for handling**

- 1、 Closed operation, full ventilation.
- 2、 Operators must be specially trained to strictly abide by the operating procedures.
- 3、 It is recommended that operators wear self-priming filter dust masks and chemical safety glasses.
- 4、 Keep away from fire, heat, and smoking in the workplace.
- 5、 Use explosion-proof ventilation systems and equipment.
- 6、 Avoid contact with oxidizing agents, reducing agents, and halogens.
- 7、 Equipped with the corresponding variety and quantity of fire-fighting equipment.

### **7.2 Precautions for storage**

- 1、 Store in a cool, ventilated warehouse.
- 2、 Keep away from fire and heat.
- 3、 It should be stored separately from oxidants, reducing agents, halogens, etc., and should not be mixed.
- 4、 Use explosion-proof lighting and ventilation facilities.
- 5、 It is forbidden to use mechanical equipment and tools that are prone to sparks.
- 6、 The storage area should be equipped with leakage emergency treatment equipment and suitable containment materials.

## **8、 Exposure controls/personal protection**

### **8.1 Control Parameters**

#### **8.1.1 Occupational exposure limits**

### Occupational Exposure limit values

Component	Country/Region	Limit value - Eight hours		Limit value - Short term	
		ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>
All components	USA - OSHA	Unspecified	Unspecified	Unspecified	Unspecified
	South Korea	Unspecified	Unspecified	Unspecified	Unspecified
	Ireland	Unspecified	Unspecified	Unspecified	Unspecified
	Germany(AGS)	Unspecified	Unspecified	Unspecified	Unspecified
	Denmark	Unspecified	Unspecified	Unspecified	Unspecified
	Australia	Unspecified	Unspecified	Unspecified	Unspecified

#### 8.1.2 Biological limit values

Biological limit values: No information available

#### 8.1.3 Monitoring methods

1、EN 14042 Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents.

2、BZ/T 160.1~GBZ/T 160.81-2004 Determination of toxic substances in workplace air (Series standard) .

#### 8.2 Engineering controls

- 1、Ensure adequate ventilation, especially in confined areas.
- 2、Ensure that eyewash stations and safety showers are close to the workstation location.
- 3、Use explosion-proof electrical/ventilating/lighting/equipment.
- 4、Set up emergency exit and necessary risk-elimination area.

#### 8.3 Personal protection equipment

##### General requirement:



**Eye protection:** Tightly fitting safety goggles (approved by EN 166(EU) or NIOSH (US)).

**Hand protection:** Wear protective gloves (such as butyl rubber), passing the tests according to EN 374(EU), US F739 or AS/NZS 2161.1 standard.

**Respiratory protection:** If exposure limits are exceeded or if irritation or other symptoms are experienced, use a full-face respirator with multi-purpose combination (US) or type AXBEK (EN 14387) respirator cartridges.

**Skin and body protection:** Wear fire/flame resistant/retardant clothing and antistatic boots.

**Other protection:** Smoking, eating and drinking are forbidden on the job site. Maintain good hygiene habits.

## 9、Physical and chemical properties

**Appearance:** Colorless transparent viscous liquid.

**Odor:** Characteristic odor.

**Odor threshold:** No data available.

**PH value:** No data available.

**Melting point/freezing point (°C) :** No data available.

**Initial boiling point and boiling range (°C) :** >50.

**Flash point (closed cup, °C) :** <23.

**Evaporation rate:** No data available.

**Flammability (solid or gas) :** No data available.

**Explosion upper/lower limit [% (v/v)]:** No data available.

**Vapor pressure (kPa) :** No data available.

**Vapor density (air = 1) :** No data available.

**Relative density (water = 1) :** No data available.

**Solubility (mg/L) :** No data available.

**Octanol/water partition coefficient:** No data available.

**Auto-ignition temperature (°C) :** No data available.

**Decomposition temperature (°C) :** No data available.

**Viscosity:** No data available.

**Others:Resistance value:** No data available.

## 10、Stability and Reactivity

**Reactivity:**Contact with incompatible materials can cause decomposition or other chemical reactions.

**Chemical stability:**Stable under the correct conditions of use and storage.

**Possibility of hazardous reactions:**No data available.

**Conditions to avoid:**Electrostatic discharge, heat, humidity, etc.

**Incompatible materials:**Strong oxides, strong acids, strong bases.

**Hazardous decomposition products:**Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## 11、Toxicological information

### 11.1 Acute toxicity

Component	LD <sub>50</sub> (oral)	LD <sub>50</sub> (Transcutaneous)	LC <sub>50</sub> (inhalation, 4h)
All components	No data available	No data available	No data available

### 11.2 Carcinogenicity

Component	IARC	NTP
All components	Not Listed	Not Listed

### 11.3 Others

Component	Corrosive skin/irritation	Serious eye damage/irritation	Skin sensitization	Respiratory sensitization	Reproductive toxicity	Specific target organ toxicity - single exposure	Specific target organ toxicity - repeated exposure	Aspiration hazard	Germ cell mutagenicity	Reproductive toxicity

All components	Not available	Not available	Not available	Not available	Not available	Not available	Not available	Not available	Not available	Not available
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## 12、 Ecological information

### 12.1 Acute aquatic toxicity

Component	Fish	Crustaceans	Algae
All components	Not available	Not available	Not available

### 12.2 Chronic aquatic toxicity

Component	Fish	Crustaceans	Algae
All components	Not available	Not available	Not available

### 12.3 Others

Component	Persistence and degradability	Bioaccumulation or bioaccumulation	Soil mobility	Evaluation of PBT and vPvB results
All components	Not available	Not available	Not available	Not available

## 13、 Disposal considerations

**Disposal considerations:**Recycle as much as possible.If it cannot be recycled, use incineration for disposal.Do not dispose of this product by means of discharge to the sewer.

**Waste chemicals:**Contaminated packaging: Residual hazards may still exist after the contents of the packaging are emptied. Keep away from heat and sources of ignition. If possible, recycle them to the supplier for recycling.

**Disposal considerations:**Refer to the "Disposal" section.

## 14、 Transportation information

**Suggestions according to IATA DGR**

**Suggestions according to IMO IMDG Code**

**United Nations Dangerous Goods Number (UN No.):** **UN 1170**

**UN proper shipping name:** Ethanol solution

**UN Risk Classification:** 3

**Packing Category:** II



**Packaging label:**

**Marine Pollutants (Yes/No):** No

**Packing method:**Pack according to the manufacturer's recommendations.

**Transportation Note:**

It is strictly prohibited to mix and transport with acids, alkalis, oxidants, foods and food additives. The exhaust pipe of the vehicle carrying this item must be equipped with a fire-retardant device, which prohibits the use of mechanical equipment and tools that generate sparks. Avoid

exposure, rain, and high temperature during transportation. The tank (tank) used for transportation shall have a grounding chain, and a hole partition may be arranged in the tank to reduce the static electricity generated by the vibration.

It is strictly prohibited to mix and transport with oxidants, acids, foods and food additives. It is strictly forbidden to use wooden boats and cement ships for bulk transportation. Avoid exposure, rain, and high temperature during transportation. Transportation vehicles shall be equipped with fire fighting equipment and emergency response treatment equipment of corresponding types and quantities. Before shipping, check whether the packaging container is complete and sealed. On the transportation means, hazard signs and announcements should be posted in accordance with the relevant transportation requirements.

## 15、Regulatory information

### International chemical inventory

Component	EINECS	TSCA	DSL	IECSC	NZIoC	PICCS	KECL	AICS
Ethyl alcohol	Listed	Listed	Listed	Listed	Listed	Listed	Listed	Listed
Glycerol	Listed	Listed	Listed	Listed	Listed	Listed	Listed	Listed
Aloe extract	Listed	Not Listed	Not Listed	Listed	Listed	Listed	Not Listed	Listed
Sodium hyaluronate	Not Listed	Not Listed	Listed	Listed	Listed	Not Listed	Not Listed	Listed
Acrylic acid polymers	Not Listed	Not Listed	Listed	Listed	Listed	Listed	Listed	Listed
Trolamine	Listed	Listed	Listed	Listed	Listed	Listed	Listed	Listed
Purified water	Listed	Listed	Listed	Listed	Listed	Listed	Listed	Listed
Denatonium	Listed	Listed	Listed	Listed	Listed	Listed	Listed	Listed

【EINECS】 European Inventory of Existing Commercial Chemical Substances

【TSCA】 United States Toxic Substances Control Act Inventory

【DSL】 Canadian Domestic Substances List

【IECSC】 China Inventory of Existing Chemical Substances

【NZIoC】 New Zealand Inventory of Chemicals

【PICCS】 Philippines Inventory of Chemicals and Chemical Substances

【KECL】 Korea Existing Chemical List

【AICS】 Australia Inventory of Chemical Substances

## 16、Others

### 16.1 Reference:

【1】 IPCS:The International Chemical Safety Cards (ICSC),website:<http://www.ilo.org>

【2】 IARC,website:<http://www.iarc.fr>

【3】 OECD:The Global Portal to Information on Chemical Substances,website:<http://www.chemportal.org>

【4】 CAMEO Chemicals,website:<http://cameochemicals.noaa.gov>

【5】 NLM:ChemIDplus,website:<http://chem.sis.nlm.nih.gov>

【6】 EPA:Integrated Risk Information System,website:<http://cfpub.epa.gov>

【7】 U.S. Department of Transportation:ERG,website:<http://www.phmsa.dot.gov>

【8】 Germany GESTIS-database on hazard substance,website:<http://gestis-en.itrust.de>

## 16.2 Others:

### 1、 Abbreviations and acronyms

CAS-Chemical Abstracts Service

PC-STEL- Short term exposure limit

DNEL-Derived No Effect Level

RPE-Respiratory Protective Equipment

LC50-Lethal Concentration 50%

NOEC-No Observed Effect Concentration

PBT-Persistent, Bioaccumulative, Toxic

BCF-Bioconcentration factor (BCF)

IMDG-International Maritime Dangerous Goods

UN-The United Nations

NFPA-National Fire Protection Association

CMR-Carcinogens, mutagens or substances toxic to reproduction

PC-TWA -Time Weighted Average

IARC-International Agency for Research on Cancer

PNEC-Predicted No Effect Concentration

LD50-Lethal Dose 50%

EC50-Effective Concentration 50%

POW-Partition coefficient Octanol:Water

vPvB-very Persistent,very Bioaccumulative

ICAO/IATA-International Civil Aviation Organization/International Air Transportation

Association

ACGIH-American Conference of Governmental Industrial Hygienists

OECD-Organization for Economic Co-operation and Development

### 2、 Disclaimer

This Safety Data Sheet (SDS) was prepared according to UN GHS (the 8th revised edition). The data included was derived from international authoritative database and provided by the enterprise. Other information was based on the present state of our knowledge. We try to ensure the correctness of all information. However, due to the diversity of information sources and the limitations of our knowledge, this document is only for user's reference. Users should make their independent judgment of suitability of this information for their particular purposes. We do not assume responsibility for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product.

**Sample photo**



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**SDS Creation Date:2020/04/27 (Valid in the year)**

# SAFETY DATA SHEET

8/20/2015

## SECTION I - IDENTIFICATION

### Material Name

HANDY ART ACRYLIC, HANDY ART NU MASTER HEAVY BODY ACRYLIC  
HANDY ART MEDIUM BODY ACRYLIC, HANDY ART NU MASTER FLUID ACRYLIC

### Company Information

Handy Art, Inc.  
365 Sunnyside Drive  
Milton, WI 53563  
Phone: 1-808-868-6873  
Fax: 1-808-868-6233  
Email: handyart@handyart.com

For emergencies call: 808-868-6873

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

AUTOIGNITION TEMPERATURE: N/A

EXTINGUISHING MEDIA: NO SPECIAL MEDIA REQUIRED  
FIRE FIGHTING PROCEDURES: NO SPECIAL FIRE FIGHTING PROCEDURES REQUIRED  
UNUSUAL FIRE & EXPLOSION HAZARDS: NOT COMBUSTIBLE

## **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	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 X - STABILITY AND REACTIVITY**

HAZARDOUS POLYMERIZATION PRODUCTS: NONE  
STABILITY: STABLE CONDITIONS TO AVOID: NONE  
INCOMPATIBILITY (MATERIALS TO AVOID): NONE  
HAZARDOUS DECOMPOSITION PRODUCTS: NONE

## **SECTION XI - TOXICOLOGICAL INFORMATION**

ACUTE EFFECTS ASSOCIATED WITH USE OF THIS MATERIAL: NONE EXPECTED  
The summated LD50 is 30276 mg/kg.  
The summated LC50 is 11787 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:

FERRIC OXIDE  
MICA  
PROPYLENE GLYCOL

### **SUPPLEMENTAL STATE COMPLIANCE INFORMATION:**

THIS PRODUCT CONTAINS THE FOLLOWING CHEMICAL(S) LISTED UNDER NEW JERSEY'S RIGHT TO KNOW PROGRAM:

CHROMIUM OXIDE GREEN  
MICA  
PIGMENT RED 101  
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:  
NONYL PHENOL ETHOXYLATE

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**

LAST REVISION DATE: 08/20/2015

**Prepared by Duke OEM Toxicology**

## COLOR INFORMATION

THIS SDS APPLIES TO THE FOLLOWING COLORS WHICH ARE ASSOCIATED WITH HAZARDOUS AND/OR NON-HAZARDOUS INGREDIENTS

Product Color	SKU	Hazardous Ingredient
000 TITANIUM WHITE		(NONE)
005 BLOCKOUT WHITE		(NONE)
010 CHROME YELLOW		(NONE)
015 YELLOW OXIDE		(NONE)
020 DEEP YELLOW		(NONE)
025 CHROME ORANGE		(NONE)
030 PHTHALO RED		(NONE)
035 VERMILION		(NONE)
040 BRITE RED		(NONE)
045 GREEN OXIDE		(NONE)
050 PHTHALO GREEN		(NONE)
055 COBALT BLUE		(NONE)
060 PHTHALO BLUE		(NONE)
065 ULTRAMARINE BLUE		(NONE)
070 MAGENTA		(NONE)
075 VIOLET		(NONE)
080 VENETIAN RED		(NONE)
085 BURNT SIENNA		(NONE)
090 BURNT UMBER		(NONE)
093 RAW SIENNA		(NONE)
095 RAW UMBER		(NONE)
100 MARS BLACK		(NONE)
105 GRAY		(NONE)
TURQUOISE		(NONE)
PEACH		(NONE)
109 ALIZARIN CRIMSON		(NONE)
109 BRIGHT RED		(NONE)
109 BUFF TITANIUM		(NONE)
109 CERULEAN BLUE HUE		(NONE)
109 CHROME GREEN OXIDE		(NONE)
109 CHROME YELLOW		(NONE)
109 COBALT BLUE HUE		(NONE)
109 HOOKER'S GREEN		(NONE)
109 LIGHT GREEN		(NONE)
109 LIGHT PORTRAIT		(NONE)
109 MAGENTA		(NONE)
109 PHTHALO BLUE		(NONE)
109 PHTHALO GREEN		(NONE)
109 PRIMARY CYAN		(NONE)
109 PRIMARY MAGENTA		(NONE)
109 PRIMARY YELLOW		(NONE)
109 PURPLE		(NONE)
109 RAW UMBER		(NONE)
109 RED OXIDE		(NONE)
109 RUBINE RED		(NONE)
109 TITANIUM WHITE		(NONE)
109 TURQUOISE GREEN		(NONE)
109 ULTRA BLUE HUE		(NONE)
109 ULTRAMARINE BLUE		(NONE)
109 VIOLET		(NONE)
109 YELLOW HANSA LIGHT		(NONE)
110 LIGHT GREEN		(NONE)
115 MAROON		(NONE)
150 FL YELLOW		(NONE)
151 FL HOT PINK		(NONE)
152 FL ORANGE		(NONE)
154 FL RED		(NONE)
155 FL MAGENTA		(NONE)
156 FL BLUE		(NONE)

<b>Product Color</b>	<b>SKU</b>	<b>Hazardous Ingredient</b>
158 FL GREEN		(NONE)
159 FL VIOLET		(NONE)
160 BRASS		(NONE)
162 GOLD		(NONE)
163 TREASURE GOLD		(NONE)
164 COPPER		(NONE)
165 BRONZE		(NONE)
166 SILVER		(NONE)
PEARLESCENT TITANIUM WHITE		(NONE)
PEARLESCENT CHROME YELLOW		(NONE)
PEARLESCENT CHROME ORANGE		(NONE)
PEARLESCENT VERMILION		(NONE)
PEARLESCENT BRITE RED		(NONE)
PEARLESCENT GREEN OXIDE		(NONE)
PEARLESCENT PHTHALO GREEN		(NONE)
PEARLESCENT PHTHALO BLUE		(NONE)
PEARLESCENT VIOLET		(NONE)
PEARLESCENT MARS BLACK		(NONE)
PRIMARY BLUE		(NONE)
BRIGHT GREEN		(NONE)
IRIDESCENT GOLD		(NONE)
IRIDESCENT SILVER		(NONE)

# SAFETY DATA SHEET

9/14/2017

## SECTION I - IDENTIFICATION

### Material Name

HANDY ART BLACK GLUE

### Company Information

Handy Art, Inc.  
365 Sunnyside Drive  
Milton, WI 53563  
Phone: 1-608-868-6873  
Fax: 1-608-868-6233  
Email: handyart@handyart.com

For emergencies call: 608-868-6873

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

<b>Hazardous Ingredients</b>	<b>CAS/EC #</b>	<b>PEL/TLV (MG/M#)</b>	<b>Max % Weight</b>	<b>NTP</b>	<b>IARC</b>
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

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 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	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 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 28142 mg/kg.  
The summated LC50 is 12046 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:

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

MICA

PIGMENT BROWN 7

PROPYLENE GLYCOL

### SUPPLEMENTAL STATE COMPLIANCE INFORMATION:

THIS PRODUCT CONTAINS THE FOLLOWING CHEMICAL(S) LISTED UNDER NEW JERSEY'S RIGHT TO KNOW PROGRAM:

CHROMIUM OXIDE GREEN

MICA

PIGMENT BROWN 7

PIGMENT RED 101

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:

Iron oxide fume

Mica dust

PIGMENT BROWN 7

n-Methylethanolamine

THIS PRODUCT CONTAINS THE FOLLOWING CHEMICAL(S) LISTED IN MAINE'S PRIORITY CHEMICAL LIST:

NONYL PHENOL ETHOXYLATE

THIS PRODUCT CONTAINS THE FOLLOWING CHEMICALS CONSIDERED BY VERMONT AS BEING OF VERY HIGH CONCERN TO CHILDREN:

NONYL PHENOL ETHOXYLATE

THIS PRODUCT CONTAINS THE FOLLOWING CHEMICAL(S) LISTED IN MASSACHUSETTS HAZARDOUS SUBSTANCE LIST:

Calcium carbonate

Carbon black

Chromium (III) oxide

Iron oxide dust

Mica Dust

N-methylethanolamine

PIGMENT BROWN 7

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:

Calcium carbonate

Carbon black

Iron oxide fume (Fe<sub>2</sub>O<sub>3</sub>) as Fe  
Limestone  
PIGMENT BROWN 7  
Propylene glycol  
Titanium dioxide

THIS PRODUCT CONTAINS THE FOLLOWING CHEMICAL(S) LISTED IN PENNSYLVANIA'S HAZARDOUS SUBSTANCES LIST:

1,2-Propanediol  
Carbon black  
Ethanol, 2-(methylamino)-  
Iron oxide  
Limestone  
Mica-group minerals  
PIGMENT BROWN 7  
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: 09/12/2017**

**Prepared by Duke OEM Toxicology**

# SAFETY DATA SHEET

8/28/2015

## SECTION I - IDENTIFICATION

### Material Name

HANDY ART TEMPERA

### Company Information

Handy Art, Inc.  
365 Sunnyside Drive  
Milton, WI 53563  
Phone: 1-808-868-6873  
Fax: 1-808-868-6233  
Email: handyart@handyart.com

For emergencies call: 808-868-6873

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

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 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	MELTING POINT: N/A
VAPOR PRESSURE: N/A	SPECIFIC GRAVITY: N/A
SPECIFIC VAPOR DENSITY (AIR=1): N/A	REACTIVITY IN WATER: NON-REACTIVE
SOLUBILITY IN WATER: N/A	

## **SECTION X - STABILITY AND REACTIVITY**

HAZARDOUS POLYMERIZATION PRODUCTS: NONE  
STABILITY: STABLE CONDITIONS TO AVOID: NONE  
INCOMPATIBILITY (MATERIALS TO AVOID): NONE  
HAZARDOUS DECOMPOSITION PRODUCTS: NONE

## **SECTION XI - TOXICOLOGICAL INFORMATION**

ACUTE EFFECTS ASSOCIATED WITH USE OF THIS MATERIAL: NONE EXPECTED  
The summated LD50 is 24816 mg/kg.  
The summated LC50 is 84660 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:  
FERRIC OXIDE  
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 RED 101  
PROPYLENE GLYCOL

THIS PRODUCT CONTAINS THE FOLLOWING CHEMICAL(S) REQUIRING NOTIFICATION TO THE STATE OF WASHINGTON UNDER THEIR CHILDREN'S SAFE PRODUCTS ACT:  
NONYL PHENOL ETHOXYLATE

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**

**LAST REVISION DATE: 08/28/2015**

**Prepared by Duke OEM Toxicology**

## COLOR INFORMATION

THIS SDS APPLIES TO THE FOLLOWING COLORS WHICH ARE ASSOCIATED WITH HAZARDOUS AND/OR NON-HAZARDOUS INGREDIENTS

Product Color	SKU	Hazardous Ingredient
000 PEACH		(NONE)
005 WHITE		(NONE)
010 YELLOW		(NONE)
015 ORANGE		(NONE)
020 RED		(NONE)
025 MAGENTA		(NONE)
030 BLUE		(NONE)
035 TURQUOISE		(NONE)
040 VIOLET		(NONE)
045 GREEN		(NONE)
050 BROWN		(NONE)
055 BLACK		(NONE)
060 GRAY		(NONE)
100 MAHOGANY		(NONE)
110 MUSTARD		(NONE)
115 OLIVE		(NONE)
120 SALMON		(NONE)
125 NUTMEG		(NONE)
150 FL YELLOW		(NONE)
152 FL ORANGE		(NONE)
153 FL PINK		(NONE)
154 FL RED		(NONE)
155 FL MAGENTA		(NONE)
156 FL BLUE		(NONE)
158 FL GREEN		(NONE)
159 FL VIOLET		(NONE)
160 BRASS		(NONE)
162 GOLD		(NONE)
163 TREASURE GOLD		(NONE)
164 COPPER		(NONE)
166 SILVER		(NONE)
SPARKLE PEACH		(NONE)
SPARKLE WHITE		(NONE)
SPARKLE YELLOW		(NONE)
SPARKLE ORANGE		(NONE)
SPARKLE RED		(NONE)
SPARKLE MAGENTA		(NONE)
SPARKLE BLUE		(NONE)
SPARKLE TURQUOISE		(NONE)
SPARKLE VIOLET		(NONE)
SPARKLE GREEN		(NONE)
SPARKLE BROWN		(NONE)
SPARKLE BLACK		(NONE)
BRONZE		(NONE)

Date: April 13, 2015

## SAFETY DATA SHEET

### SECTION 1 - IDENTIFICATION

**Product identifier used on the label:** Heavy Duty Degreaser

**Other means of Identification:** ES75

**Recommended use of the chemical and restrictions on use:** For professional use only.

**Manufacturer/Supplier:**

Charlotte Products Ltd.

**Address:**

2060 Fisher Dr.

Peterborough, On K9J 8N4

**Telephone:** 705-740-2880

**Fax:** 705-745-1239

**24 Hr. Emergency Tel. #:** Infotrac 1-800-535-5053 (North America), 011-1-352-323-3500 (International)

### SECTION 2 - HAZARDS IDENTIFICATION

**Classification of the chemical:**

Skin Corrosion/Irritation 2

Eye Damage/Irritation 2A

**Label elements:**

**Signal Word:** Warning

**Hazard statement(s)**

H315 Causes skin irritation

H319 Causes serious eye irritation

**Precautionary statement(s)**

P264 Wash exposed areas thoroughly after handling

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

P362 Take off contaminated clothing and wash before reuse

**If swallowed:** Rinse mouth. Do NOT induce vomiting. Immediately call a poison center or doctor/physician.

**If on skin (or hair):** Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation occurs get medical advice/attention. Wash contaminated clothing before reuse.

**If inhaled:** Remove person to fresh air and keep comfortable for breathing. Call a poison center or doctor/physician if you feel unwell

**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 call a doctor/physician.

Hazard pictogram(s)



Other hazards not otherwise classified: None Known

Unknown Acute Toxicity: 0.1%

### SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name, Common Name & Synonyms:	CAS #	Concentration %
Sodium Gluconate	527-07-1	1-5
Sodium Metasilicate	6834-92-0	0.5-1.5
Alcohol Ethoxylates	68991-48-0	3-7
Lauryl Dimethylamine Oxide, Hydrogen Peroxide (<1%)	70592-80-2, 7722-84-1	0.5-1.5
Sodium Polycarboxylate		1-5

**\*\* If the chemical name/CAS # is "proprietary" and/or the weight % is shown as a range, this information had been withheld as a trade secret.**

### SECTION 4 - FIRST-AID MEASURES

**Description of first aid measures:**

**If swallowed:** Rinse mouth. Do NOT induce vomiting. Immediately call a poison center or doctor/physician.

**If on skin (or hair):** Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation occurs get medical advice/attention. Wash contaminated clothing before reuse.

**If inhaled:** Remove person to fresh air and keep comfortable for breathing. Call a poison center or doctor/physician if you feel unwell

**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 call a doctor/physician.

**Most Important symptoms and effects, both acute and delayed:** Causes skin and eye irritation.

**Indication of any immediate medical attention and special treatment needed:** Treat symptomatically

### SECTION 5 - FIRE-FIGHTING MEASURES

**Extinguishing media:**

**Suitable extinguishing media:** Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable extinguishing media:** Not determined

**Special hazards arising from the substance or mixture:** None known

**Flammability classification:** Not flammable

**Hazardous combustion products:** Carbon oxides, oxides of phosphorus other unidentified organic compounds.

**Special protective equipment and precautions for firefighters:**

**Protective equipment for fire-fighters:** Firelighters should wear proper protective equipment and self-contained breathing apparatus with full face piece operated in positive pressure mode.

**Special fire-fighting procedures:** Move containers from fire area if safe to do so. Cool closed containers exposed to fire with water spray. Do not allow run-off from firefighting to enter drains or water courses. Dike for water control.

## SECTION 6 - ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures:** All persons dealing with the clean-up should wear the appropriate chemically protective equipment. Keep people away from and upwind of spill/leak. Restrict access to area until completion of clean-up. Refer to protective measures listed in sections 7 and 8.

**Methods and material for containment and cleaning up:** Do not allow material to contaminate ground water system. If necessary, dike well ahead of the spill to prevent runoff into drains, sewers, or any natural waterway or drinking supply. Ventilate the area. Prevent further leakage or spillage if safe to do so. Soak up with inert absorbent material. Do not use combustible absorbents, such as sawdust. Pick up and transfer to properly labeled containers. Contaminated absorbent material may pose the same hazards as the spilled product. Contact the proper local authorities.

**Special spill response procedures:** In case of a transportation accident, contact Infotrac 1-800-535-5053 (North America), 011-1-352-323-3500 (International). If a spill/release in the US in excess of the EPA reportable quantity is made into the environment, immediately notify the national response center in the United States (phone: 1-800-424-8802).

## SECTION 7 - HANDLING AND STORAGE

**Precautions for safe handling:** Handle in accordance with good industrial hygiene and safety practice. Use protective equipment recommended in section 8. Avoid contact with skin, eyes or clothing. Do not breathe dust/fume/gas/mist/vapors/spray. Wash face, hands, and any exposed skin thoroughly after handling.

**Conditions for safe storage:** Keep container tightly closed and store in a cool, dry and well-ventilated place. Store locked up. Keep out of reach of children.

**Incompatible materials:** Oxidizing agents. Do not mix with other chemicals or cleaners

## SECTION 8 - EXPOSURE CONTROLS AND PERSONAL PROTECTION

Exposure Limits:					
Chemical Name	CAS #	TWA	STEL	OSHA PEL	
				PEL	STEL
Sodium Gluconate	527-07-1				
Sodium Metasilicate	6834-92-0				
		Ceiling: 10 mg/m3			
Alcohol Ethoxylates	68991-48-0				

Lauryl Dimethylamine Oxide, 70592-80-2					
Hydrogen Peroxide (<1%) 7722-84-1,					
Sodium Polycarboxylate					

#### **Exposure controls:**

**Ventilation and engineering measures:** Use only in well-ventilated areas. Apply technical measures to comply with the occupational exposure limits. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. In case of insufficient ventilation wear suitable respiratory equipment.

**Respiratory protection:** If airborne concentrations are above the permissible exposure limit or are not known, use NIOSH-approved respirators. Respirators should be selected based on the form and concentration of contaminants in air, and in accordance with OSHA (29 CFR 1910.134). Advice should be sought from respiratory protection specialists.

**Skin protection:** Wear protective gloves. Where extensive exposure to product is possible, use resistant coveralls, apron and boots to prevent contact. The suitability for a specific workplace should be discussed with the producers of the protective regimes.

**Eye face protection:** Wear eye/face protection. Wear as appropriate tightly fitting safety goggles; Safety glasses with side-shields.

**Other protective equipment:** Ensure that eyewash stations and safety showers are close to the workstation location. Other equipment may be required depending on workplace standards.

**General hygiene considerations:** Do not breathe vapours or spray mist. Avoid contact with skin, eyes and clothing. Do not eat, drink or smoke when using this product. Wash exposed areas thoroughly after handling. Remove and wash contaminated clothing before re-use. Handle in accordance with good industrial hygiene and safety practice.

### **SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES**

**Appearance:** Clear red liquid

**Odor:** No Fragrance Added

**Odor threshold:** No applicable information available

**pH (Conc.) :** 10.5-11.4

(Diluted): 1:32 – 10.15

1:64- 10.0

1:128- 9.8

1:256- 9.5

**Melting/Freezing point:** No applicable information available

**Initial boiling point and boiling range:** 100 C

**Flash point:** No applicable information available

**Flashpoint (Method):** No applicable information available

**Evaporation rate (BuAe = 1):** Similar to water

**Flammability (solid, gas):** Not flammable

**Lower flammable limit (% by vol.):** Not Flammable

**Upper flammable limit (% by vol.):** Not Flammable

**Vapor pressure:** No applicable information available

**Vapor density:** No applicable information available

**Relative density:** 1.04

**Solubility in water:** Soluble

**Other solubility(ies):** No applicable information available

**Partition coefficient:** No applicable information available

**Auto ignition temperature:** No applicable information available

**Decomposition temperature:** No applicable information available

**Viscosity:** Water thin.

**Volatile organic Compounds (%VOC's):** 0 g/L

**Other physical/chemical comments:** No applicable information available

## **SECTION 10 - STABILITY AND REACTIVITY**

**Reactivity:** Not normally reactive

**Chemical stability:** Stable

**Possibility of hazardous reactions:** No hazardous polymerization

**Conditions to avoid:** Keep out of reach of children. Do not use in areas without adequate ventilation. Avoid contact with incompatible materials.

**Incompatible materials:** Fluorine, strong oxidizing or reducing agents, bases, metals, sulfur trioxide, phosphorus pentoxide

**Hazardous decomposition products:** None known. Refer to 'Hazardous Combustion Products' in Section 5

## **SECTION 11 - TOXICOLOGICAL INFORMATION**

Information on likely routes of exposure:

**Routes of entry - inhalation:** Avoid breathing vapors or mists

**Routes of entry - skin & eye:** Avoid contact with skin or eyes

**Routes of entry - Ingestion:** Do not taste or swallow

**Potential Health Effects:**

**Signs and symptoms of short term (acute) exposure:**

**Symptoms:** Please see section 4 of this SDS sheet for symptoms.

**Potential Chronic Health Effects:**

**Mutagenicity:** Not expected to be mutagenic in humans.

**Carcinogenicity:** No components are listed as carcinogens by ACGIH, IARC, OSHA or NTP.

**Reproductive effects:** No applicable information available

**Sensitization to material:** No applicable information available

**Specific target organ effects:** No data available to indicate product or components will have specific target organ effects.

**Medical conditions aggravated by overexposure:** Preexisting skin or eye disorders.

**Toxicological data:**

See the following table for individual ingredient acute toxicity data.

Chemical name	CAS #	LD <sub>50</sub>	LD <sub>50</sub>	LC <sub>50</sub>
		(Oral, rat)	(Dermal. Rabbit)	(4hr, Inhal., rat)
Sodium Gluconate	527-07-1	2001	2001	
Sodium Metasilicate	6834-92-0	1153		
Alcohol Ethoxylates	68991-48-0	2000		
Lauryl Dimethylamine Oxide,	70592-80-2			
Hydrogen Peroxide (<1%)	7722-84-1	2700		
Sodium Polycarboxylate		2001		

\*All empty cells no applicable information available

Other important toxicological hazards: None reported.

**SECTION 12 - ECOLOGICAL INFORMATION**

**Ecotoxicity:** May be dangerous for the environment. No data is available on the product itself. Should not be released into the environment.

**Persistence and degradability:** No applicable information available

**Bioaccumulation potential:** No applicable information available.

**Mobility in soil:** No applicable information available.

**Other Adverse Environmental effects:** No applicable information available.

**SECTION 13 - DISPOSAL CONSIDERATIONS**

**Handling for disposal:** Handle in accordance with good industrial hygiene and safety practice. Refer to protective measures listed in sections 7 and 8. Empty containers retain residue (liquid and/or vapour) and can be dangerous.

**Methods of disposal:** Dispose in accordance with all applicable federal, state, provincial and local regulations. Contact your local, state, provincial or federal environmental agency for specific rules.

**RCRA:** If this product, as supplied, becomes a waste in the United States, it may meet the criteria of a hazardous waste UN defined under RCRA, Title 40 CFR 261. It is the responsibility of the waste generator to determine the proper waste identification and disposal method. For disposal of unused or waste material, check with local, state and federal environmental agencies.

## SECTION 14 - TRANSPORTATION INFORMATION

**Special Shipping Information:** Keep from freezing.

**T.D.G. Classification:** Not regulated under T.D.G.

**D.O.T. Classification:** Not regulated under D.O.T.

## SECTION 15 - REGULATORY INFORMATION

**Occupational Health and Safety Regulations:**

WHMIS 1988 Class: D2B.

OSHA & WHMIS: SDS prepared pursuant to the Hazard Communication Standard (CFR29 1910.1200) and Canadian WHMIS 2015 regulations (Controlled Products Regulations under the Hazardous Product Act).

**Environmental Regulatory Lists:**

SARA – Section 313 (Toxic Chemical Release Reporting) 40 CFR 372 – None of these ingredients are listed.

CERCLA – Section 102 (Reportable Quantity) 40 CFR 302 – None of these ingredients are listed.

RCRA 40CFR 261 (SUBPART D) – None of these ingredients are listed.

CLEAN WATER ACT – Section 311 (Reportable Quantity) 40 CFR 116 - None of these ingredients are listed.

CLEAN AIR ACT – Section 312 (List of Hazardous Air Pollutants) 40 CFR 63 (Subpart C) – None of these ingredients are listed.

National Pollutant Release Inventory – None of the ingredients are listed.

Toxic Substances Control Act (TSCA) – All the ingredients are registered on the Chemical Substance Inventory.

Canadian Domestic Substance List (DSL) – All the ingredients are registered on the DSL.

## SECTION 16 - OTHER INFORMATION

**Legend:**

ACGIH: American Conference of Governmental Industrial Hygienists

CAS: Chemical Abstract Services

CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act of 1980

CFR: Code of Federal Regulations

CSA: Canadian Standards Association

DOT: Department of Transportation

ECOTOX: U.S. EPA Ecotoxicology Database

ENECS: European Inventory of Existing Commercial chemical Substances

EPA: Environmental Protection Agency

HSDB: Hazardous Substances Data Bank

IARC: International Agency for Research on Cancer

IUCLID: International Uniform Chemical Information Database

LC: Lethal Concentration

LD: Lethal Dose

NIOSH: National Institute of Occupational Safety and Health

NTP: National Toxicology Program

OECD: Organization for Economic Co operation and Development

OSHA: Occupational Safety and Health Administration

PEL: Permissible exposure limit

RCRA: Resource Conservation and Recovery Act

RTECS: Registry of Toxic Effects of Chemical Substances

SARA: Superfund Amendments and Reauthorization Act

SDS: Safety Data Sheet Material Safety Data Sheet

STEL: Short Term Exposure Limit

TOG: Canadian Transportation of Dangerous Goods Act & Regulations

TLV: Threshold Limit Values

TWA: Time Weighted Average

WHMIS: Workplace Hazardous Materials Identification System

## **DISCLAIMER**

Information for this material safety data sheet 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 this supplier, it is assumed that users of this material have been fully trained accordingly to the mandatory requirements of GHS. 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 within this form.

**END OF DOCUMENT**

# SAFETY DATA SHEET

BD1181

## Section 1. Identification

**Product name** : Heavy Duty Silicone Lube Low V.O.C.  
**Product code** : BD1181  
**Other means of identification** : Not available.  
**Product type** : Aerosol.  
**Relevant identified uses of the substance or mixture and uses advised against**  
Not applicable.

**Manufacturer** : Distributed by Class C Solutions Group, a business of MSC Industrial Supply Co.  
75 Maxess Road  
Melville, NY 11747-3151

**Emergency telephone number of the company** : (303) 623-5716

**Product Information Telephone Number** : (866) 438-6767

**Regulatory Information Telephone Number** : (216) 566-2902

**Transportation Emergency Telephone Number** : (800) 424-9300

## Section 2. Hazards identification

**OSHA/HCS status** : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

**Classification of the substance or mixture** : FLAMMABLE AEROSOLS - Category 1  
GASES UNDER PRESSURE - Compressed gas  
SKIN CORROSION/IRRITATION - Category 2  
SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A  
TOXIC TO REPRODUCTION (Fertility) - Category 2  
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3  
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3  
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2  
ASPIRATION HAZARD - Category 1  
Percentage of the mixture consisting of ingredient(s) of unknown oral toxicity: 34.6%  
Percentage of the mixture consisting of ingredient(s) of unknown dermal toxicity: 94.6%  
Percentage of the mixture consisting of ingredient(s) of unknown inhalation toxicity: 71%

### GHS label elements

**Hazard pictograms**



**Signal word**

: Danger

## Section 2. Hazards identification

**Hazard statements** : Extremely flammable aerosol.  
Contains gas under pressure; may explode if heated.  
Causes serious eye irritation.  
Causes skin irritation.  
Suspected of damaging fertility.  
May be fatal if swallowed and enters airways.  
May cause respiratory irritation.  
May cause drowsiness or dizziness.  
May cause 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. Wear protective gloves. Wear eye or face protection. Wear protective clothing. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not spray on an open flame or other ignition source. Use only outdoors or in a well-ventilated area. Do not breathe dust or mist. Wash hands thoroughly after handling. Pressurized container: Do not pierce or burn, even after use.

**Response** : Get medical attention if you feel unwell. IF exposed or concerned: Get medical attention. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or physician if you feel unwell. IF SWALLOWED: Immediately call a POISON CENTER or physician. Do NOT induce vomiting. IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing and wash it before reuse. If skin irritation occurs: Get medical attention. 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.

**Storage** : Store locked up. Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F. Store in a well-ventilated place.

**Disposal** : Dispose of contents and container in accordance with all local, regional, national and international regulations.

**Supplemental label elements** DELAYED EFFECTS FROM LONG TERM OVEREXPOSURE. Contains solvents which can cause permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents can be harmful or fatal. WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. FOR INDUSTRIAL USE ONLY.  
Please refer to the SDS for additional information. Keep out of reach of children. Keep upright in a cool, dry place. Do not discard empty can in trash compactor.

**Hazards not otherwise classified** : None known.

## Section 3. Composition/information on ingredients

**Substance/mixture** : Mixture

**Other means of identification** : Not available.

### CAS number/other identifiers

Ingredient name	% by weight	CAS number
Acetone	35	67-64-1
Hexane	23.6	110-54-3
Propane	15	74-98-6
2-Methylpentane	10.94	107-83-5
3-Methylpentane	4.05	96-14-0
2,3-Dimethylbutane	3.44	79-29-8
Cyclohexane	1.35	110-82-7
2,2-Dimethylbutane	1.22	75-83-2

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

## Section 3. Composition/information on ingredients

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

## Section 4. First aid measures

### Description of necessary first aid measures

- Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.
- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- Skin contact** : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Aspiration hazard if swallowed. Can enter lungs and cause damage. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

### Most important symptoms/effects, acute and delayed

#### Potential acute health effects

- Eye contact** : Causes serious eye irritation.
- Inhalation** : Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness. May cause respiratory irritation.
- Skin contact** : Causes skin irritation.
- Ingestion** : Can cause central nervous system (CNS) depression. May be fatal if swallowed and enters airways.

#### Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following:  
pain or irritation  
watering  
redness
- Inhalation** : Adverse symptoms may include the following:  
respiratory tract irritation  
coughing  
nausea or vomiting  
headache  
drowsiness/fatigue  
dizziness/vertigo  
unconsciousness  
reduced fetal weight  
increase in fetal deaths  
skeletal malformations

## Section 4. First aid measures

- Skin contact** : Adverse symptoms may include the following:  
irritation  
redness  
reduced fetal weight  
increase in fetal deaths  
skeletal malformations
- Ingestion** : Adverse symptoms may include the following:  
nausea or vomiting  
reduced fetal weight  
increase in fetal deaths  
skeletal malformations

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

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Specific treatments** : No specific treatment.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

See toxicological information (Section 11)

## Section 5. Fire-fighting measures

### Extinguishing media

- Suitable extinguishing media** : Use an extinguishing agent suitable for the surrounding fire.
- Unsuitable extinguishing media** : None known.

- Specific hazards arising from the chemical** : Extremely flammable aerosol. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Gas may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back, causing fire or explosion. Bursting aerosol containers may be propelled from a fire at high speed. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

- Hazardous thermal decomposition products** : Decomposition products may include the following materials:  
carbon dioxide  
carbon monoxide

- Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## Section 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. In the case of aerosols being ruptured, care should be taken due to the rapid escape of the pressurized contents and propellant. If a large number of containers are ruptured, treat as a bulk material spillage according to the instructions in the clean-up section. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
- For emergency responders** : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities.

### Methods and materials for containment and cleaning up

- Small spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
- Large spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

## Section 7. Handling and storage

### Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use. Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not swallow. Avoid breathing gas. Avoid release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Empty containers retain product residue and can be hazardous.
- Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

## Section 7. Handling and storage

**Conditions for safe storage, including any incompatibilities** : Store in accordance with local regulations. Store away from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Protect from sunlight. Store locked up. Eliminate all ignition sources. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

## Section 8. Exposure controls/personal protection

### Control parameters

#### Occupational exposure limits (OSHA United States)

Ingredient name	Exposure limits
Acetone	<b>ACGIH TLV (United States, 3/2016).</b> TWA: 250 ppm 8 hours. STEL: 500 ppm 15 minutes. <b>NIOSH REL (United States, 10/2016).</b> TWA: 250 ppm 10 hours. TWA: 590 mg/m <sup>3</sup> 10 hours. <b>OSHA PEL (United States, 6/2016).</b> TWA: 1000 ppm 8 hours. TWA: 2400 mg/m <sup>3</sup> 8 hours.
Hexane	<b>ACGIH TLV (United States, 3/2016).</b> <b>Absorbed through skin.</b> TWA: 50 ppm 8 hours. <b>NIOSH REL (United States, 10/2016).</b> TWA: 50 ppm 10 hours. TWA: 180 mg/m <sup>3</sup> 10 hours. <b>OSHA PEL (United States, 6/2016).</b> TWA: 500 ppm 8 hours. TWA: 1800 mg/m <sup>3</sup> 8 hours.
Propane	<b>NIOSH REL (United States, 10/2016).</b> TWA: 1000 ppm 10 hours. TWA: 1800 mg/m <sup>3</sup> 10 hours. <b>OSHA PEL (United States, 6/2016).</b> TWA: 1000 ppm 8 hours. TWA: 1800 mg/m <sup>3</sup> 8 hours.
2-Methylpentane	<b>ACGIH TLV (United States, 3/2016).</b> TWA: 500 ppm 8 hours. TWA: 1760 mg/m <sup>3</sup> 8 hours. STEL: 1000 ppm 15 minutes. STEL: 3500 mg/m <sup>3</sup> 15 minutes. <b>NIOSH REL (United States, 10/2016).</b> TWA: 100 ppm 10 hours. TWA: 350 mg/m <sup>3</sup> 10 hours. CEIL: 510 ppm 15 minutes. CEIL: 1800 mg/m <sup>3</sup> 15 minutes.
3-Methylpentane	<b>ACGIH TLV (United States, 3/2016).</b> TWA: 500 ppm 8 hours. TWA: 1760 mg/m <sup>3</sup> 8 hours. STEL: 1000 ppm 15 minutes. STEL: 3500 mg/m <sup>3</sup> 15 minutes. <b>NIOSH REL (United States, 10/2016).</b> TWA: 100 ppm 10 hours. TWA: 350 mg/m <sup>3</sup> 10 hours. CEIL: 510 ppm 15 minutes. CEIL: 1800 mg/m <sup>3</sup> 15 minutes.
2,3-Dimethylbutane	<b>ACGIH TLV (United States, 3/2016).</b> TWA: 500 ppm 8 hours. TWA: 1760 mg/m <sup>3</sup> 8 hours.

## Section 8. Exposure controls/personal protection

Cyclohexane	<p>STEL: 1000 ppm 15 minutes.          STEL: 3500 mg/m<sup>3</sup> 15 minutes.  <b>NIOSH REL (United States, 10/2016).</b>          TWA: 100 ppm 10 hours.          TWA: 350 mg/m<sup>3</sup> 10 hours.          CEIL: 510 ppm 15 minutes.          CEIL: 1800 mg/m<sup>3</sup> 15 minutes.  <b>ACGIH TLV (United States, 3/2016).</b>          TWA: 100 ppm 8 hours.  <b>NIOSH REL (United States, 10/2016).</b>          TWA: 300 ppm 10 hours.          TWA: 1050 mg/m<sup>3</sup> 10 hours.  <b>OSHA PEL (United States, 6/2016).</b>          TWA: 300 ppm 8 hours.          TWA: 1050 mg/m<sup>3</sup> 8 hours.  <b>ACGIH TLV (United States, 3/2016).</b>          TWA: 500 ppm 8 hours.          TWA: 1760 mg/m<sup>3</sup> 8 hours.          STEL: 1000 ppm 15 minutes.          STEL: 3500 mg/m<sup>3</sup> 15 minutes.  <b>NIOSH REL (United States, 10/2016).</b>          TWA: 100 ppm 10 hours.          TWA: 350 mg/m<sup>3</sup> 10 hours.          CEIL: 510 ppm 15 minutes.          CEIL: 1800 mg/m<sup>3</sup> 15 minutes.</p>
2,2-Dimethylbutane	<p>STEL: 1000 ppm 15 minutes.          STEL: 3500 mg/m<sup>3</sup> 15 minutes.  <b>NIOSH REL (United States, 10/2016).</b>          TWA: 100 ppm 10 hours.          TWA: 350 mg/m<sup>3</sup> 10 hours.          CEIL: 510 ppm 15 minutes.          CEIL: 1800 mg/m<sup>3</sup> 15 minutes.</p>

### Occupational exposure limits (Canada)

Ingredient name	Exposure limits
Acetone	<p><b>CA Alberta Provincial (Canada, 4/2009).</b>          8 hrs OEL: 1200 mg/m<sup>3</sup> 8 hours.          15 min OEL: 1800 mg/m<sup>3</sup> 15 minutes.          8 hrs OEL: 500 ppm 8 hours.          15 min OEL: 750 ppm 15 minutes.  <b>CA British Columbia Provincial (Canada, 7/2016).</b>          TWA: 250 ppm 8 hours.          STEL: 500 ppm 15 minutes.  <b>CA Ontario Provincial (Canada, 7/2015).</b>          TWA: 500 ppm 8 hours.          STEL: 750 ppm 15 minutes.  <b>CA Québec Provincial (Canada, 1/2014).</b>          TWAEV: 500 ppm 8 hours.          TWAEV: 1190 mg/m<sup>3</sup> 8 hours.          STEV: 1000 ppm 15 minutes.          STEV: 2380 mg/m<sup>3</sup> 15 minutes.  <b>CA Saskatchewan Provincial (Canada, 7/2013).</b>          STEL: 750 ppm 15 minutes.          TWA: 500 ppm 8 hours.</p>
Hexane	<p><b>CA Alberta Provincial (Canada, 4/2009).</b>  <b>Absorbed through skin.</b>          8 hrs OEL: 50 ppm 8 hours.          8 hrs OEL: 176 mg/m<sup>3</sup> 8 hours.  <b>CA British Columbia Provincial (Canada, 7/2016).</b> <b>Absorbed through skin.</b>          TWA: 20 ppm 8 hours.  <b>CA Ontario Provincial (Canada, 7/2015).</b></p>

## Section 8. Exposure controls/personal protection

Propane

**Absorbed through skin.**  
TWA: 50 ppm 8 hours.  
**CA Québec Provincial (Canada, 1/2014).**  
**Absorbed through skin.**  
TWAEV: 50 ppm 8 hours.  
TWAEV: 176 mg/m<sup>3</sup> 8 hours.  
**CA Saskatchewan Provincial (Canada, 7/2013).** **Absorbed through skin.**  
STEL: 62.5 ppm 15 minutes.  
TWA: 50 ppm 8 hours.  
**CA Alberta Provincial (Canada, 4/2009).**  
8 hrs OEL: 1000 ppm 8 hours.  
**CA British Columbia Provincial (Canada, 7/2016).**  
TWA: 1000 ppm 8 hours.  
**CA Québec Provincial (Canada, 1/2014).**  
TWAEV: 1000 ppm 8 hours.  
TWAEV: 1800 mg/m<sup>3</sup> 8 hours.  
**CA Ontario Provincial (Canada, 7/2015).**  
TWA: 1000 ppm 8 hours.  
**CA Saskatchewan Provincial (Canada, 7/2013).**  
STEL: 1250 ppm 15 minutes.  
TWA: 1000 ppm 8 hours.

2-Methylpentane

**CA Alberta Provincial (Canada, 4/2009).**  
15 min OEL: 3500 mg/m<sup>3</sup> 15 minutes.  
8 hrs OEL: 1760 mg/m<sup>3</sup> 8 hours.  
15 min OEL: 1000 ppm 15 minutes.  
8 hrs OEL: 500 ppm 8 hours.  
**CA British Columbia Provincial (Canada, 7/2016).**  
TWA: 200 ppm 8 hours.  
**CA Ontario Provincial (Canada, 7/2015).**  
TWA: 500 ppm 8 hours.  
STEL: 1000 ppm 15 minutes.  
**CA Québec Provincial (Canada, 1/2014).**  
TWAEV: 500 ppm 8 hours.  
TWAEV: 1760 mg/m<sup>3</sup> 8 hours.  
STEV: 1000 ppm 15 minutes.  
STEV: 3500 mg/m<sup>3</sup> 15 minutes.  
**CA Saskatchewan Provincial (Canada, 7/2013).**  
STEL: 1000 ppm 15 minutes.  
TWA: 500 ppm 8 hours.

3-Methylpentane

**CA Alberta Provincial (Canada, 4/2009).**  
8 hrs OEL: 500 ppm 8 hours.  
15 min OEL: 1000 ppm 15 minutes.  
15 min OEL: 3500 mg/m<sup>3</sup> 15 minutes.  
8 hrs OEL: 1760 mg/m<sup>3</sup> 8 hours.  
**CA British Columbia Provincial (Canada, 7/2016).**  
TWA: 200 ppm 8 hours.  
**CA Ontario Provincial (Canada, 7/2015).**  
TWA: 500 ppm 8 hours.  
STEL: 1000 ppm 15 minutes.  
**CA Québec Provincial (Canada, 1/2014).**  
TWAEV: 500 ppm 8 hours.  
TWAEV: 1760 mg/m<sup>3</sup> 8 hours.  
STEV: 1000 ppm 15 minutes.

## Section 8. Exposure controls/personal protection

2,3-Dimethylbutane

STEV: 3500 mg/m<sup>3</sup> 15 minutes.  
**CA Saskatchewan Provincial (Canada, 7/2013).**  
 STEL: 1000 ppm 15 minutes.  
 TWA: 500 ppm 8 hours.

**CA Alberta Provincial (Canada, 4/2009).**  
 8 hrs OEL: 1760 mg/m<sup>3</sup> 8 hours.  
 15 min OEL: 1000 ppm 15 minutes.  
 15 min OEL: 3500 mg/m<sup>3</sup> 15 minutes.  
 8 hrs OEL: 500 ppm 8 hours.

**CA British Columbia Provincial (Canada, 7/2016).**

TWA: 200 ppm 8 hours.

**CA Ontario Provincial (Canada, 7/2015).**

TWA: 500 ppm 8 hours.

STEL: 1000 ppm 15 minutes.

**CA Québec Provincial (Canada, 1/2014).**

TWAEV: 500 ppm 8 hours.

TWAEV: 1760 mg/m<sup>3</sup> 8 hours.

STEV: 1000 ppm 15 minutes.

STEV: 3500 mg/m<sup>3</sup> 15 minutes.

**CA Saskatchewan Provincial (Canada, 7/2013).**

STEL: 1000 ppm 15 minutes.

TWA: 500 ppm 8 hours.

Cyclohexane

**CA Alberta Provincial (Canada, 4/2009).**

8 hrs OEL: 344 mg/m<sup>3</sup> 8 hours.

8 hrs OEL: 100 ppm 8 hours.

**CA British Columbia Provincial (Canada, 7/2016).**

TWA: 100 ppm 8 hours.

**CA Ontario Provincial (Canada, 7/2015).**

TWA: 100 ppm 8 hours.

**CA Québec Provincial (Canada, 1/2014).**

TWAEV: 300 ppm 8 hours.

TWAEV: 1030 mg/m<sup>3</sup> 8 hours.

**CA Saskatchewan Provincial (Canada, 7/2013).**

STEL: 150 ppm 15 minutes.

TWA: 100 ppm 8 hours.

2,2-Dimethylbutane

**CA Alberta Provincial (Canada, 4/2009).**

8 hrs OEL: 1760 mg/m<sup>3</sup> 8 hours.

15 min OEL: 1000 ppm 15 minutes.

15 min OEL: 3500 mg/m<sup>3</sup> 15 minutes.

8 hrs OEL: 500 ppm 8 hours.

**CA British Columbia Provincial (Canada, 7/2016).**

TWA: 200 ppm 8 hours.

**CA Ontario Provincial (Canada, 7/2015).**

TWA: 500 ppm 8 hours.

STEL: 1000 ppm 15 minutes.

**CA Québec Provincial (Canada, 1/2014).**

TWAEV: 500 ppm 8 hours.

TWAEV: 1760 mg/m<sup>3</sup> 8 hours.

STEV: 1000 ppm 15 minutes.

STEV: 3500 mg/m<sup>3</sup> 15 minutes.

**CA Saskatchewan Provincial (Canada, 7/2013).**

## Section 8. Exposure controls/personal protection

STEL: 1000 ppm 15 minutes.  
TWA: 500 ppm 8 hours.

### Occupational exposure limits (Mexico)

<b>Ingredient name</b>	<b>Exposure limits</b>
Acetone	<b>NOM-010-STPS-2014 (Mexico, 4/2016).</b> TWA: 500 ppm 8 hours. STEL: 750 ppm 15 minutes.
Hexane	<b>NOM-010-STPS-2014 (Mexico, 4/2016).</b> <b>Absorbed through skin.</b> TWA: 50 ppm 8 hours.
Propane	<b>NOM-010-STPS-2014 (Mexico, 4/2016).</b> TWA: 1000 ppm 8 hours.
2-Methylpentane	<b>NOM-010-STPS-2014 (Mexico, 4/2016).</b> STEL: 1000 ppm 15 minutes. TWA: 500 ppm 8 hours.
3-Methylpentane	<b>NOM-010-STPS-2014 (Mexico, 4/2016).</b> STEL: 1000 ppm 15 minutes. TWA: 500 ppm 8 hours.
2,3-Dimethylbutane	<b>NOM-010-STPS-2014 (Mexico, 4/2016).</b> STEL: 1000 ppm 15 minutes. TWA: 500 ppm 8 hours.
Cyclohexane	<b>NOM-010-STPS-2014 (Mexico, 4/2016).</b> TWA: 100 ppm 8 hours.
2,2-Dimethylbutane	<b>NOM-010-STPS-2014 (Mexico, 4/2016).</b> STEL: 1000 ppm 15 minutes. TWA: 500 ppm 8 hours.

#### **Appropriate engineering controls**

: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

#### **Environmental exposure controls**

: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

### Individual protection measures

#### **Hygiene measures**

: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

#### **Eye/face protection**

: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

#### **Skin protection**

## Section 8. Exposure controls/personal protection

<b>Hand protection</b>	: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
<b>Body protection</b>	: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.
<b>Other skin protection</b>	: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
<b>Respiratory protection</b>	: Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

## Section 9. Physical and chemical properties

### Appearance

<b>Physical state</b>	: Liquid.
<b>Color</b>	: Not available.
<b>Odor</b>	: Not available.
<b>Odor threshold</b>	: Not available.
<b>pH</b>	: 7
<b>Melting point</b>	: Not available.
<b>Boiling point</b>	: Not available.
<b>Flash point</b>	: Closed cup: -23°C (-9.4°F) [Pensky-Martens Closed Cup]
<b>Evaporation rate</b>	: 9.1 (butyl acetate = 1)
<b>Flammability (solid, gas)</b>	: Not available.
<b>Lower and upper explosive (flammable) limits</b>	: Lower: 1% Upper: 12.8%
<b>Vapor pressure</b>	: 101.3 kPa (760 mm Hg) [at 20°C]
<b>Vapor density</b>	: 1.55 [Air = 1]
<b>Relative density</b>	: 0.68
<b>Solubility</b>	: Not available.
<b>Partition coefficient: n-octanol/water</b>	: Not available.
<b>Auto-ignition temperature</b>	: Not available.
<b>Decomposition temperature</b>	: Not available.
<b>Viscosity</b>	: Kinematic (40°C (104°F)): <0.205 cm <sup>2</sup> /s (<20.5 cSt)
<b>Molecular weight</b>	: Not applicable.
<b><u>Aerosol product</u></b>	
<b>Type of aerosol</b>	: Spray
<b>Heat of combustion</b>	: 36.295 kJ/g

## Section 10. Stability and reactivity

<b>Reactivity</b>	: No specific test data related to reactivity available for this product or its ingredients.
<b>Chemical stability</b>	: The product is stable.
<b>Possibility of hazardous reactions</b>	: Under normal conditions of storage and use, hazardous reactions will not occur.
<b>Conditions to avoid</b>	: Avoid all possible sources of ignition (spark or flame).
<b>Incompatible materials</b>	: No specific data.
<b>Hazardous decomposition products</b>	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## Section 11. Toxicological information

### Information on toxicological effects

#### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Acetone	LD50 Oral	Rat	5800 mg/kg	-
Hexane	LC50 Inhalation Gas.	Rat	48000 ppm	4 hours
	LD50 Oral	Rat	15840 mg/kg	-
Cyclohexane	LD50 Oral	Rat	6240 mg/kg	-

#### Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Acetone	Eyes - Mild irritant	Human	-	186300 parts per million	-
	Eyes - Mild irritant	Rabbit	-	10 microliters	-
	Eyes - Moderate irritant	Rabbit	-	24 hours 20 milligrams	-
	Eyes - Severe irritant	Rabbit	-	20 milligrams	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
	Skin - Mild irritant	Rabbit	-	395 milligrams	-
Hexane	Eyes - Mild irritant	Rabbit	-	10 milligrams	-

#### Sensitization

Not available.

#### Mutagenicity

Not available.

#### Carcinogenicity

Not available.

#### Reproductive toxicity

Not available.

#### Teratogenicity

Not available.

#### Specific target organ toxicity (single exposure)

## Section 11. Toxicological information

Name	Category	Route of exposure	Target organs
Acetone	Category 3	Not applicable.	Respiratory tract irritation and Narcotic effects
Hexane	Category 3	Not applicable.	Respiratory tract irritation and Narcotic effects
Propane	Category 3	Not applicable.	Respiratory tract irritation and Narcotic effects
2-Methylpentane	Category 3	Not applicable.	Respiratory tract irritation and Narcotic effects
3-Methylpentane	Category 3	Not applicable.	Respiratory tract irritation and Narcotic effects
2,3-Dimethylbutane	Category 3	Not applicable.	Respiratory tract irritation and Narcotic effects
Cyclohexane	Category 3	Not applicable.	Respiratory tract irritation and Narcotic effects
2,2-Dimethylbutane	Category 3	Not applicable.	Respiratory tract irritation and Narcotic effects

### Specific target organ toxicity (repeated exposure)

Name	Category	Route of exposure	Target organs
Acetone	Category 2	Not determined	Not determined
Hexane	Category 2	Not determined	Not determined
Propane	Category 2	Not determined	Not determined
2-Methylpentane	Category 2	Not determined	Not determined
3-Methylpentane	Category 2	Not determined	Not determined
2,3-Dimethylbutane	Category 2	Not determined	Not determined
Cyclohexane	Category 2	Not determined	Not determined
2,2-Dimethylbutane	Category 2	Not determined	Not determined

### Aspiration hazard

Name	Result
Hexane	ASPIRATION HAZARD - Category 1
Propane	ASPIRATION HAZARD - Category 1
2-Methylpentane	ASPIRATION HAZARD - Category 1
3-Methylpentane	ASPIRATION HAZARD - Category 1
2,3-Dimethylbutane	ASPIRATION HAZARD - Category 1
Cyclohexane	ASPIRATION HAZARD - Category 1
2,2-Dimethylbutane	ASPIRATION HAZARD - Category 1

**Information on the likely routes of exposure** : Not available.

### Potential acute health effects

**Eye contact** : Causes serious eye irritation.

**Inhalation** : Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness. May cause respiratory irritation.

**Skin contact** : Causes skin irritation.

**Date of issue/Date of revision**

: 9/9/2017

**Date of previous issue**

: 4/17/2017

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**Ingestion** : Can cause central nervous system (CNS) depression. May be fatal if swallowed and enters airways.

#### Symptoms related to the physical, chemical and toxicological characteristics

**Eye contact** : Adverse symptoms may include the following:  
pain or irritation  
watering  
redness

**Inhalation** : Adverse symptoms may include the following:  
respiratory tract irritation  
coughing  
nausea or vomiting  
headache  
drowsiness/fatigue  
dizziness/vertigo  
unconsciousness  
reduced fetal weight  
increase in fetal deaths  
skeletal malformations

**Skin contact** : Adverse symptoms may include the following:  
irritation  
redness  
reduced fetal weight  
increase in fetal deaths  
skeletal malformations

**Ingestion** : Adverse symptoms may include the following:  
nausea or vomiting  
reduced fetal weight  
increase in fetal deaths  
skeletal malformations

#### Delayed and immediate effects and also chronic effects from short and long term exposure

##### Short term exposure

**Potential immediate effects** : Not available.

**Potential delayed effects** : Not available.

##### Long term exposure

**Potential immediate effects** : Not available.

**Potential delayed effects** : Not available.

##### Potential chronic health effects

Not available.

**General** : May cause damage to organs through prolonged or repeated exposure.

**Carcinogenicity** : No known significant effects or critical hazards.

**Mutagenicity** : No known significant effects or critical hazards.

**Teratogenicity** : No known significant effects or critical hazards.

**Developmental effects** : No known significant effects or critical hazards.

**Fertility effects** : Suspected of damaging fertility.

#### Numerical measures of toxicity

##### Acute toxicity estimates

Not available.

## Section 12. Ecological information

### Toxicity

Product/ingredient name	Result	Species	Exposure
Acetone	Acute EC50 7200000 µg/l Fresh water	Algae - Selenastrum sp.	96 hours
	Acute LC50 6000000 µg/l Fresh water	Crustaceans - Gammarus pulex	48 hours
	Acute LC50 6900 mg/l Fresh water	Daphnia - Daphnia magna	48 hours
	Acute LC50 5600 ppm Fresh water	Fish - Poecilia reticulata	96 hours
	Chronic NOEC 4.95 mg/l Marine water	Algae - Ulva pertusa	96 hours
	Chronic NOEC 0.016 ml/L Fresh water	Crustaceans - Daphniidae	21 days
	Chronic NOEC 0.1 ml/L Fresh water	Daphnia - Daphnia magna - Neonate	21 days
	Chronic NOEC 0.1 mg/l Fresh water	Fish - Fundulus heteroclitus	4 weeks
	Acute LC50 2500 µg/l Fresh water	Fish - Pimephales promelas	96 hours
	Acute LC50 4530 µg/l Fresh water	Fish - Pimephales promelas	96 hours
Hexane			
Cyclohexane			

### Persistence and degradability

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Acetone	-	-	Readily

### Bioaccumulative potential

Product/ingredient name	LogP <sub>ow</sub>	BCF	Potential
Hexane	-	501.187	high
Cyclohexane	-	167	low

### Mobility in soil

Soil/water partition coefficient (K<sub>oc</sub>) : Not available.

Other adverse effects : No known significant effects or critical hazards.

## Section 13. Disposal considerations






**Disposal methods** : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Do not puncture or incinerate container.

## Section 14. Transport information

	DOT Classification	TDG Classification	Mexico Classification	IATA	IMDG
UN number	UN1950	UN1950	UN1950	UN1950	UN1950
UN proper shipping name	AEROSOLS	AEROSOLS	AEROSOLS	AEROSOLS, flammable	AEROSOLS

Date of issue/Date of revision : 9/9/2017 Date of previous issue : 4/17/2017 Version : 5 15/18

## Section 14. Transport information

Transport hazard class(es)	2.1 	2.1 	2.1 	2.1 	2.1 
Packing group	-	-	-	-	-
Environmental hazards	No.	No.	No.	No.	No.
Additional information	-  <b>ERG No.</b> 126	Product classified as per the following sections of the Transportation of Dangerous Goods Regulations: 2.13-2.17 (Class 2). <b>ERG No.</b> 126	-  <b>ERG No.</b> 126	-	<b>Emergency schedules</b> F-D, S-U

**Special precautions for user :** Multi-modal shipping descriptions are provided for informational purposes and do not consider container sizes. The presence of a shipping description for a particular mode of transport (sea, air, etc.), does not indicate that the product is packaged suitably for that mode of transport. All packaging must be reviewed for suitability prior to shipment, and compliance with the applicable regulations is the sole responsibility of the person offering the product for transport. People loading and unloading dangerous goods must be trained on all of the risks deriving from the substances and on all actions in case of emergency situations.

**Transport in bulk according to Annex II of MARPOL and the IBC Code :** Not available.

**Proper shipping name :** Not available.  
**Ship type :** Not available.  
**Pollution category :** Not available.

## Section 15. Regulatory information

### SARA 313

SARA 313 (40 CFR 372.45) supplier notification can be found on the Environmental Data Sheet.

### California Prop. 65

WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

## Section 16. Other information

### Hazardous Material Information System (U.S.A.)

Health	*	2
Flammability		4
Physical hazards		0

The customer is responsible for determining the PPE code for this material. For more information on HMIS® Personal Protective Equipment (PPE) codes, consult the HMIS® Implementation Manual.

## Section 16. Other information

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings and the associated label are not required on SDSs or products leaving a facility under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered trademark and service mark of the American Coatings Association, Inc.

### Procedure used to derive the classification

Classification	Justification
FLAMMABLE AEROSOLS - Category 1	On basis of test data
GASES UNDER PRESSURE - Compressed gas	Calculation method
SKIN CORROSION/IRRITATION - Category 2	Calculation method
SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A	Calculation method
TOXIC TO REPRODUCTION (Fertility) - Category 2	Calculation method
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3	Calculation method
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3	Calculation method
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2	Calculation method
ASPIRATION HAZARD - Category 1	Calculation method

### History

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**Version** : 5

**Key to abbreviations** : ATE = Acute Toxicity Estimate  
BCF = Bioconcentration Factor  
GHS = Globally Harmonized System of Classification and Labelling of Chemicals  
IATA = International Air Transport Association  
IBC = Intermediate Bulk Container  
IMDG = International Maritime Dangerous Goods  
LogPow = logarithm of the octanol/water partition coefficient  
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)  
UN = United Nations

### Notice to reader

It is recommended that each customer or recipient of this Safety Data Sheet (SDS) study it carefully and consult resources, as necessary or appropriate, to become aware of and understand the data contained in this SDS and any hazards associated with the product. This information is provided in good faith and believed to be accurate as of the effective date herein. However, no warranty, express or implied, is given. The information presented here applies only to the product as shipped. The addition of any material can change the composition, hazards and risks of the product. Products shall not be repackaged, modified, or tinted except as specifically instructed by Sherwin-Williams, including but not limited to the incorporation of non Sherwin-Williams products or the use or addition of products in proportions not specified by Sherwin-Williams. Regulatory requirements are subject to change and may differ between various locations and jurisdictions. The customer/buyer/user is responsible to ensure that his activities comply with all country, federal, state, provincial or local laws. The conditions for use of the product are not under the control of the manufacturer; the customer/buyer/user is responsible to determine the conditions necessary for the safe use of this product. The customer/buyer/user should not use the product for any purpose other than the purpose shown in the applicable section of this SDS without first referring to the supplier and obtaining written handling instructions. Due to the proliferation of sources for information such as manufacturer-specific SDS, the manufacturer cannot be responsible for SDSs obtained from any other source.



## Section 1 Chemical Product and Company Information

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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.

**Product** HEPTANE

**Synonyms** n-Heptane / normal-Heptane

## Section 2 Hazards Identification

**Signal word:** DANGER

**Pictograms:** GHS02 / GHS07 / GHS08 / GHS09

**Target organs:** Central nervous system

**GHS Classification:**

Flammable liquid (Category 2)

Aspiration hazard (Category 1)

Skin irritation (Category 2)

STOT-SE (Category 3)

Aquatic toxicity, acute (Category 1)

Aquatic toxicity, chronic (Category 1)

**GHS Label information: Hazard statement:**

H225: Highly flammable liquid and vapour.

H304: May be fatal if swallowed and enters airways.

H315: Causes skin irritation.

H336: May cause drowsiness or dizziness.

H400: Very toxic to aquatic life.

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

**Precautionary statement:**

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

P233: Keep container tightly closed.

P241: Use explosion-proof electrical/ventilating/lighting equipment.

P242: Use only non-sparking tools.

P243: Take precautionary measures against static discharge.

P261: Avoid breathing mist/vapours/spray.

P264: Wash hands thoroughly after handling.

P271: Use only outdoors or in a well-ventilated area.

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

P301+P310: IF SWALLOWED: Immediately call a POISON CENTER or doctor.

P331: 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.

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

P332+P313: If skin irritation occurs: Get medical attention.

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

P312: Call a POISON CENTER or doctor if you feel unwell.

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

P370+P378: In case of fire: Use dry chemical, CO<sub>2</sub>, water spray or alcohol-resistant foam to extinguish.

P273: Avoid release to the environment.

P391: Collect spillage.

P403+P235: Store in a well-ventilated place. Keep cool.

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
Heptane	142-82-5	100%	205-563-8

## Section 4 First Aid Measures

**INGESTION:** MAY BE FATAL IF SWALLOWED AND ENTERS AIRWAYS. 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 DROWSINESS OR DIZZINESS. 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:** 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:** Dry chemical, CO<sub>2</sub>, water spray or regular 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. Vapors may form explosive mixtures with air. Vapors may travel to source of ignition and flash back. Containers may explode when heated.

## 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. 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. Keep away from ignition sources.

**Section 8 Exposure Controls / Personal Protection**

Exposure Limits:	Chemical Name	ACGIH (TLV)	OSHA (PEL)	NIOSH (REL)
	Heptane	TWA: 400 ppm STEL: 500 ppm	TWA: 500 ppm / 2000 mg/m <sup>3</sup>	TWA: 85 ppm STEL: C 440 ppm

**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:** Use a chemical fume hood and/or wear a NIOSH/MSHA-approved respirator.

**Section 9 Physical & Chemical Properties**

<b>Appearance:</b> Clear, colorless liquid	<b>Evaporation rate (Butyl acetate = 1):</b> 5.8	<b>Partition coefficient:</b> (n-octanol / water): Log Pow: 4.66
<b>Odor:</b> Paraffinic odor	<b>Flammability (solid/gas):</b> Data not available	<b>Auto-ignition temperature:</b> 246-260°C (475-500°F) ASTM E-659
<b>Odor threshold:</b> Data not available	<b>Explosion limits: Lower / Upper:</b> 1.0%(V) / 7.0%(V)	<b>Decomposition temperature:</b> Data not available
<b>pH:</b> Data not available	<b>Vapor pressure (mm Hg):</b> 6-7.7 kPa @ 68°F	<b>Viscosity:</b> Data not available
<b>Melting / Freezing point:</b> Data not available	<b>Vapor density (Air = 1):</b> 713 kg/m <sup>3</sup> @ 59°F	<b>Molecular formula:</b> CH <sub>3</sub> (CH <sub>2</sub> ) <sub>5</sub> CH <sub>3</sub>
<b>Boiling point:</b> 90-100°C (194-212°F)	<b>Relative density (Specific gravity):</b> 0.7-0.71 @ 68°F	<b>Molecular weight:</b> 100.21
<b>Flash point:</b> <-7°C (19°F)	<b>Solubility(ies):</b> Soluble in 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.

**Incompatible materials:** Strong oxidizers such as liquid chlorine, concentrated oxygen, sodium hypochlorite or calcium hypochlorite.

**Hazardous decomposition products:** Carbon oxides.

**Section 11 Toxicological Information**

**Acute toxicity:** Oral-rat LD50: 17,000 mg/kg; Inhalation-rat: 60 mg/L/48 hours; Dermal-rabbit LD50: 3,000 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:** 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:** The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with narcotic effects.

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

**Aspiration hazard:** Data not available

**Potential health effects:**

Inhalation: Inhalation may cause lethargy and headache.

Ingestion: Ingestion causes abdominal cramps, burning sensation, nausea, and vomiting.

Skin: Contact with skin causes dryness.

Eyes: Contact with eyes causes redness and pain.

**Signs and symptoms of exposure:** If this liquid is swallowed, aspiration into the lungs may result in chemical pneumonitis. The substance may cause effects on the central nervous system. Exercise appropriate procedures to minimize potential hazards.

**Additional information:** RTECS #: MI7700000

**Section 12 Ecological Information**

**Toxicity to fish:** Gambusia affinis (fish, fresh water), TLm = 4924 mg/L/48 hours

**Toxicity to daphnia and other aquatic invertebrates:** Daphnia magna (Crustacea), EC50 = >10 mg/L/24 hours

**Toxicity to algae:** Algae, EC50 Photosynthesis= 1.5 mg/L/8 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:** The substance is toxic to aquatic organisms. Bioaccumulation of this chemical may occur in fish.

**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 Other Information (US DOT / CANADA / IATA)**



**UN/NA number:** UN1206      **Shipping name:** Heptanes

**Hazard class:** 3      **Packing group:** II      **Reportable Quantity:** No      **Marine pollutant:** No

**Exceptions:** Limited quantity equal to or less than 1 L      **2012 ERG Guide #** 128

**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
Heptane	Listed	Not listed	Not listed	Listed	Not listed	  B2; 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: March 25, 2014

Supersedes: March 25, 2014

**Safety Data Sheet**  
Hospital Disinfectant Deodorant

**SECTION I - IDENTIFICATION**

**PRODUCT NAME:** Hospital Disinfectant Deodorant  
**PRODUCT CODE:** S3324012  
**PRODUCT USE:** Disinfectant Deodorant  
**COMPANY NAME:** Simoniz  
**COMPANY ADDRESS:** 201 Boston Turnpike, Bolton, CT 06043  
**COMPANY PHONE:** 860-646-0172  
**EMERGENCY PHONE:** 800-255-3924

**SECTION II – HAZARDS IDENTIFICATION**

**CLASSIFICATION:** Flammable Aerosol: Category 2

Liquefied Gas

Eye Irritant: Category 2A

**HAZARD STATEMENT(S): WARNING:** Flammable Aerosol Contains gas under pressure; May explode if heated. Contains gas under pressure; May explode if heated. Causes serious eye irritation.

This product contains the following percentage of chemicals of unknown toxicity: 0%

**PRECAUTIONARY STATEMENTS:** Keep away from heat, sparks, open flames, and hot surfaces. -No smoking. Do not spray on an open flame or other ignition source. Pressurized container: Do not pierce or burn, even after use. Protect from sunlight. Do not expose to temperatures exceeding 50C/122F. Store in a well-ventilated place. Wash hands thoroughly after handling. Wear eye protection. 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.



**SYMBOL:**

**HAZARDS NOT OTHERWISE CLASSIFIED:** N/A

**SECTION III – COMPOSITION/INFORMATION ON INGREDIENTS**

HAZARDOUS INGREDIENT	CAS NUMBER	PERCENT
Propane/n-Butane	68476-86-8	10-30%
Ethyl Alcohol	64-17-5	40-70%

**SECTION IV - FIRST AID MEASURES**

**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 or attention.

**INGESTION:** If swallowed: Rinse mouth. Do NOT induce vomiting. Get medical advice or attention.

**INHALATION:** Move to fresh air. If breathing is difficult, administer oxygen. If not breathing administer artificial respiration or at any sign of loss of consciousness seek immediate medical attention.

**SKIN:** Wash thoroughly with soap and water. Seek medical attention if irritation develops.

**ACUTE HEALTH HAZARDS:** Eye exposure causes transient pain and irritation

**CHRONIC HEALTH HAZARDS:** None known

**NOTE TO PHYSICIAN:** There is no specific treatment regimen. Treatment of overexposure should be directed at the control of symptoms and the clinical condition of the patient.

**SECTION V – FIRE-FIGHTING MEASURES**

**EXTINGUISHING MEDIA:** Carbon dioxide, standard chemical fire extinguisher, and water fog.

**UNSUITABLE EXTINGUISHING MEDIA:** N/A

**SPECIAL FIRE FIGHTING PROCEDURES:** Wear NIOSH approved Self Contained Breathing Apparatus with a full face piece operated in a positive pressure demand mode with full body protective clothing when fighting fires. Avoid contact with skin and breathing smoke, fumes, and decomposition products. Cool fire exposed containers with water fog to prevent bursting.

**UNUSUAL FIRE AND EXPLOSION HAZARDS:** Keep away from sparks, open flames, and hot surfaces. No smoking. Do not spray on an open flame or other ignition source.

## Safety Data Sheet

**HAZARDOUS COMBUSTION PRODUCTS:** None Known

### SECTION VI – ACCIDENTAL RELEASE MEASURES

**PERSONAL PROTECTIVE EQUIPMENT:** Refer to section VIII for proper Personal Protective Equipment.

**SPILL:** Absorb with non-combustible material like vermiculite, sand or earth and rinse with small amount of soapy water. Do not allow to drain into sewers or storm drains. Dispose of in accordance with local, state and federal regulations.

**WASTE DISPOSAL:** Do not puncture or incinerate! If empty: Place in trash or offer for recycling if available. If partly filled: Call your local solid waste agency or 1-800-CLEANUP for disposal instructions.

**RCRA STATUS:** Product should be fully characterized prior to disposal (40 CFR 261).

### SECTION VII – HANDLING AND STORAGE

**HANDLING AND STORAGE:** Protect from sunlight. Store in a well ventilated place. Do not expose to temperatures exceeding 50°C/122°F. Pressurized container: Do not pierce or burn, even after use.

**OTHER PRECAUTIONS:** Do not contaminate other materials (including foods/drinks/feeds/water) during transport, use, storage, and disposal.

**INCOMPATIBILITY:** Strong oxidizing agents.

### SECTION VIII – EXPOSURE CONTROLS/PERSONAL PROTECTION

HAZARDOUS INGREDIENT	OSHA PEL	ACGIH TLV
Propane/n-Butane	1000 ppm	1000 ppm
Ethyl Alcohol	1000 ppm	1000 ppm

**ENGINEERING CONTROLS / VENTILATION:** General ventilation and local exhaust should be adequate.

**RESPIRATORY PROTECTION:** Wear NIOSH/MSHA approved respiratory protection if used in confined, poorly ventilated areas.

**PERSONAL PROTECTIVE EQUIPMENT:** Safety glasses and chemical resistant gloves

**ADDITIONAL MEASURES:** Wash hands and clothing in contact with product after use.

### SECTION IX - PHYSICAL AND CHEMICAL PROPERTIES

**APPEARANCE:** Light yellow, clear to hazy aerosol

**ODOR:** Country Garden

**ODOR THRESHOLD:** N/D

**BOILING POINT:** >170°F

**FREEZING POINT:** N/D

**FLAMMABILITY:** Flammable Aerosol

**FLASH POINT:** N/D

**AUTOIGNITION TEMPERATURE:** N/D

**LOWER FLAMMABILITY LIMIT:** N/D

**UPPER FLAMMABILITY LIMIT:** N/D

**VAPOR PRESSURE (mm Hg):** 44 @ 77°F (25°C)

**VAPOR DENSITY (AIR=1):** > 1 @ 77°F (25°C)

**EVAPORATION RATE:** 1

**SPECIFIC GRAVITY (H<sub>2</sub>O=1):** 0.875 @ 77° F (25° C)

**pH:** 7.0

**SOLIDS (%):** N/D

**SOLUBILITY IN WATER:** 100%

**PARTITION COEFFICIENT: n-OCTANOL/WATER (K<sub>ow</sub>):** N/D

**VOLATILITY INCLUDING WATER (%):** 100%

**VOLATILE ORGANIC COMPOUNDS (VOC):** 69%

**DIELECTRIC STRENGTH (Volts):** N/A

**DECOMPOSITION TEMPERATURE:** N/D

**VISCOSITY:** N/D

# Safety Data Sheet

## SECTION X – STABILITY AND REACTIVITY DATA

**REACTIVITY:** None Known

**CHEMICAL STABILITY:** Stable

**CONDITIONS TO AVOID:** Temperatures greater than 122°F may cause bursting.

**INCOMPATIBILITY:** Strong oxidizing agents.

**HAZARDOUS DECOMPOSITION OR BY-PRODUCT:** Oxides of carbon

**POSSIBLE HAZARDOUS REACTIONS:** None Known

## SECTION XI – TOXICOLOGICAL INFORMATION

**TOXICOLOGICAL INFORMATION:** Ethyl Alcohol (64-17-5) LC<sub>50</sub> (Inhalation, Mouse, 4hr) 39 gr/m<sup>3</sup>; LC<sub>50</sub> (Inhalation, Rat, 10hr) 20,000 ppm; LD<sub>50</sub> (Oral, Mouse) 3450 mg/kg; LD<sub>50</sub> (Oral, Rabbit) 6300 mg/kg; LD<sub>50</sub> (Oral, Rabbit) 7060 mg/kg

**ROUTES OF ENTRY:** Eyes, Ingestion, Inhalation, Skin

**EYES:** Causes severe irritation, redness, tearing.

**INGESTION:** Causes gastrointestinal irritation, nausea, vomiting.

**INHALATION:** Acute exposure may cause nausea, vomiting, coughing and pulmonary irritation.

**SKIN:** Causes irritation with prolonged contact.

**MEDICAL CONDITION AGGRAVATED:** Pre-existing disorders of the skin, respiratory system, and eyes will be aggravated by over exposure.

**ACUTE HEALTH HAZARDS:** Eye exposure causes transient pain and irritation

**CHRONIC HEALTH HAZARDS:** None known

**CARCINOGENICITY:** OSHA: No ACGIH: No NTP: No IARC: No OTHER: N/A

## SECTION XII – ECOLOGICAL INFORMATION

**ECOLOGICAL INFORMATION:** Ethyl Alcohol (64-17-5) LC<sub>50</sub> (Fish, 96hr) 12,900-15,300 mg/L; LC<sub>50</sub> (Bacteria, 24hr) 11,200 mg/L; EC<sub>50</sub> (Bacteria, 5-30 min) 34,900 mg/L

**BIODEGRADABILITY:** Component or components of this product are not biodegradable.

**BIOACCUMULATION:** This product is not expected to bioaccumulate.

**SOIL MOBILITY:** This product is mobile in soil.

**OTHER ECOLOGICAL HAZARDS:** None Known

## SECTION XIII – DISPOSAL CONSIDERATIONS

**WASTE DISPOSAL:** Do not puncture or incinerate! If empty: Place in trash or offer for recycling if available. If partly filled: Call your local solid waste agency or 1-800-CLEANUP for disposal instructions.

**RCRA STATUS:** Product should be fully characterized prior to disposal (40 CFR 261).

## SECTION XIV - TRANSPORTATION INFORMATION

**PROPER SHIPPING NAME:** Aerosols, Ltd. Qty.

**HAZARD CLASS/DIVISION:** 2.1

**UN/NA NUMBER:** UN 1950

**PACKAGING GROUP:** N/A

### AIR SHIPMENT

**PROPER SHIPPING NAME:** Aerosols, Ltd. Qty.

**HAZARD CLASS/DIVISION:** 2.1

**UN/NA NUMBER:** UN 1950

### SHIPPING BY WATER:

#### VESSEL (IMO/IMDG)

**PROPER SHIPPING NAME:** Aerosols, Ltd. Qty.

**HAZARD CLASS/DIVISION:** 2.1

**UN/NA NUMBER:** UN 1950

**ENVIRONMENTAL HAZARDS WATER:** N/A

**SECTION XV - REGULATORY INFORMATION**

**TSCA STATUS:** All Chemicals are listed or exempt.

**CERCLA (COMPREHENSIVE RESPONSE COMPENSATION, AND LIABILITY ACT):** Fire Hazard

**SARA 311/312 HAZARD CATEGORIES:** Ethyl Alcohol (64-17-5) Acute Health, Chronic Health, Fire

**SARA 313 REPORTABLE INGREDIENTS:** Ethyl Alcohol (64-17-5) acute, chronic, flammable.

**CLEAN WATER ACT:** None

**STATE REGULATIONS:** CALIFORNIA PROPOSITION 65: 2-Phenylphenol **Warning:** This product contains a chemical(s) known to the State of California to cause cancer.

**INTERNATIONAL REGULATIONS:** All components are listed or exempted.

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:

**WARNING:** Causes substantial but temporary eye injury. Harmful if absorbed through skin. Do not get in eyes or on skin or clothing. Wear long-sleeved shirt and long pants, protective eyewear (safety glasses), shoes and socks, and chemical resistant gloves (such as or made out of any water proof material). Wash hands thoroughly with soap and water before eating, drinking, chewing gum, using tobacco or using the toilet. Remove contaminated clothing and wash clothing. Flammable. Contents under pressure. Keep away from heat, sparks, pilot lights, and flames. Do not puncture or incinerate container. Exposure to temperatures above 130°F (54°C) may cause bursting.

EPA Reg. No. 44446-67

**NFPA HEALTH:** 1

**NFPA FLAMMABILITY:** 3

**NFPA REACTIVITY:** 1

**NFPA OTHER:** N/A

**HMIS HEALTH:** 1

**HMIS FLAMMABILITY:** 3

**HMIS REACTIVITY:** 1

**HMIS PROTECTION:** A

**SECTION XVI - ADDITIONAL INFORMATION**

**PREPARATION BY:** Jonathon Jarvis

**DATE PREPARED:** 11/13/2013

**REVISION DATE:** 03/03/2015

N/A = Not Applicable; N/D = Not Determined

**DISCLAIMER:** To the best of our knowledge, information contained herein is accurate. However there is no assumption of liability for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazard which exists. The information contained in this SDS was obtained from current and reliable sources; however, the data is provided without any warranty, expressed or implied, regarding its correctness or accuracy. Since the conditions or handling, storage and disposal of this product are beyond the control of the manufacturer, the manufacturer will not be responsible for loss, injury, or expense arising out of the products improper use. No warranty, expressed or inferred, regarding the product described in this SDS shall be created or inferred by any statement in this SDS. Various government agencies may have specific regulations regarding the transportation, handling, storage, use, or disposal of this product which may not be covered by this SDS. The user is responsible for full compliance.

# SAFETY DATA SHEET

## State Industrial Products

5915 Landerbrook Drive  
Mayfield Heights, OH 44124  
To Order Call: 1-866-747-2229

6935 Davand Drive  
Mississauga, Ontario L5T 1L5  
To Order Call: 1-800-668-6513

Royal Industrial Park, Bldg "M"  
Local #5, Carr 869, km 1.5 Palmas  
Cataño, P.R. 00962  
To Order Call: 787-275-3185



## 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: HWS-135  
Product Description: A closed loop water treatment product.  
EPA Registration Number: NA

24 Hour Emergency CHEMTREC Number: 800-424-9300  
MSDS Number: 124735  
EPA Establishment Number: NA

## 2. HAZARDS IDENTIFICATION

### \*\*\*EMERGENCY OVERVIEW\*\*\*

FIFRA Hazard Classification:

Not Applicable

Skin corrosion/irritation: Category 1A, B, C  
Serious eye damage/eye irritation: Category 2A  
Aspiration Hazard: Category 2  
Acute toxicity; oral: Category 4



Corrosive



Exclamation  
mark



Human Health

DANGER

Hazard Statements:

H314 Causes severe skin burns and eye damage. H319\_3 Causes serious eye irritation. H305\_3 May be harmful if swallowed and enters airways H302 Harmful if swallowed.

Precautionary Statements:

P261 Avoid breathing vapors. P264 Wash hands thoroughly after handling. P270 Do not eat, drink or smoke when using this product. P280 Wear protective gloves, protective clothing, and eye protection.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Ingredients	CAS Number	Weight	ACGIH	OSHA
Sodium Nitrite	7632-00-0	<10.0%	NE	NE
Sodium Molybdate Dihydrate	10102-40-6	<2.0%	0.5 mg/m <sup>3</sup> TWA	5 mg/m <sup>3</sup> PEL
Sodium Tolytriazole	64665-57-2	<1.0%	NE	NE
Sodium Hydroxide	1310-73-2	<1.0%	2 mg/m <sup>3</sup>	2 mg/m <sup>3</sup>

The exact percentages have  
been withheld as a trade secret.

## 4. FIRST AID MEASURES

P301\_3+P310\_3+P331\_3 IF SWALLOWED: Immediately call a POISON CENTER or physician. Do NOT induce vomiting. P301+P312 IF SWALLOWED: call a POISON CENTER or physician if you feel unwell. P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. P302+P352 IF ON SKIN: Wash with plenty of soap and water. P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. 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 advice.

## 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

P402 Store in dry place. 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: Clear  
Physical State: Liquid.  
Solubility in Water: 100%  
Boiling Point: >212 °F[100°C]  
Freezing Point: NA  
Melting Point: NA

Odor: Mild.  
pH: 11.5-12.5  
Diluted pH: NA  
Specific Gravity: 1.04  
VOC Content: NA

## 10. STABILITY AND REACTIVITY

Stability: Stable  
Hazardous Polymerization: Will not occur.  
Conditions to Avoid: Do not mix with any other chemicals.  
Incompatibility: None expected  
Hazardous Decomposition Products: Carbon Dioxide, Carbon Monoxide

## 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>
Sodium Nitrite	7632-00-0	180 mg/kg (oral rat)	7,5 ppm/48 hr (mosquito fish)
Sodium Molybdate Dihydrate	10102-40-6	NE	7600 mg/l, acute 96 hr, rainbow trout
Sodium Tolytriazole	64665-57-2	NE	NE
Sodium Hydroxide	1310-73-2	40 mg/Kg (oral mouse); 500 mg/kg (oral rabbit)	179 mg/l/96 hr (flathead minnow)

## 12. ECOLOGICAL INFORMATION

This product is toxic to fish.

## 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 Regulated  
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/NDSL.

Proposition 65: This product contains no listed substances known to the State of California to cause cancer, birth defects or reproductive harm, at reportable levels under the statute.

SARA 313: This product contains the following toxic chemicals subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 (40CFR372):sodium nitrite CAS No 7632-00-0 less than 10%

VOC: NA

HMIS RATING: HEALTH = 2 FLAMMABILITY = 0 REACTIVITY = 0 PPE = B

WHMIS RATING: See hazards identified in Section 2 above.

## 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: 06/21/2019

Replaces: 08/11/2014

# FICHE SIGNALÉTIQUE DE SÉCURITÉ

## State Industrial Products

5915 Landerbrook Drive  
Mayfield Heights, OH 44124  
To Order Call: 1-866-747-2229

6935 Davand Drive  
Mississauga, Ontario L5T 1L5  
To Order Call: 1-800-668-6513

Royal Industrial Park, Bldg "M"  
Local #5, Carr 869, km 1.5 Palmas  
Cataño, P.R. 00962  
To Order Call: 787-275-3185



## 1. IDENTIFICATION DU PRODUIT CHIMIQUE ET DE LA SOCIÉTÉ

Nom du produit : HWS-135

Description du produit : liquide de traitement d'eau de chaudière en circuit fermé

EPA Registration Number : NA

Numéro d'urgence CHEMTREC 24 h/24 : 800-424-9300

Numéro de la fiche signalétique de produit : 124735

EPA Establishment Number : NA

## 2. IDENTIFICATION DES DANGERS

\*\*\*VUE GÉNÉRALE D'URGENCE\*\*\*



Corrosif



Point  
d'exclamation



Santé humaine

DANGER

Mention de danger:

H314 Provoque des brûlures de la peau et des lésions oculaires graves. H319\_3 Provoque une sévère irritation des yeux. H305\_3 Peut être nocif en cas d'ingestion et de pénétration dans les voies. H302 Nocif en cas d'ingestion.

Conseils de prudence:

P261 Éviter de respirer les vapeurs. P264 Se laver soigneusement la peau après manutention. P270 Ne pas manger, boire ou fumer en manipulant ce produit. P280 Porter des gants de protection, des vêtements de protection, une protection oculaire.

## 3. COMPOSITION/INFORMATION SUR LES INGRÉDIENTS

Ingrédients dangereux	Numéro CAS	Poids	ACGIH	OSHA
Nitrite de sodium	7632-00-0	<10.0%	NE	NE
Sodium Molybdate Dihydrate	10102-40-6	<2.0%	0.5 mg/m <sup>3</sup> TWA	5 mg/m <sup>3</sup> PEL
Sodium Tolytriazole	64665-57-2	<1.0%	NE	NE
Sodium Hydroxide	1310-73-2	<1.0%	2 mg/m <sup>3</sup>	2 mg/m <sup>3</sup>

The exact percentages have  
been withheld as a trade secret.

## 4. PREMIERS SOINS

P301\_3+P310\_3+P331\_3 EN CAS D'INGESTION : Appeler immédiatement un CENTRE ANTIPOISON ou un médecin. NE PAS faire vomir. P301+P312 EN CAS D'INGESTION : Appeler un CENTRE ANTIPOISON ou un médecin en cas de malaise. P301+P330+P331 EN CAS D'INGESTION : Rincer la bouche. NE PAS faire vomir. P302+P352 EN CAS DE CONTACT AVEC LA PEAU: laver abondamment à l'eau et au savon. P304+P340 EN CAS D'INHALATION : Transporter la victime à l'extérieur et la maintenir au repos dans une position où elle peut confortablement respirer. 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: consulter un médecin. P337+P313 Si l'irritation oculaire persiste: consulter un médecin.

## 5. EN CAS D'INCENDIE

Point d'éclair : Aucun jusqu'au point d'ébullition.

Limite d'explosivité inférieure (LIE) : NA Limite d'explosivité supérieure (LSE) : NA

Température d'auto-inflammation : NA

Propriétés d'inflammabilité : aucune présumée

Moyens d'extinction : Dioxyde de carbone, poudre chimique, mousse extinctrice.

Lutte contre l'incendie : Porter un appareil respiratoire autonome et des vêtements de protection complète.

## 6. ÉMISSIONS ACCIDENTELLES

Ventiler la zone. Interrompre le déversement à la source, l'endiguer et le contenir. Évacuer à grande eau. Éliminer conformément aux réglementations fédérale, provinciale et locale en vigueur en matière d'élimination des déchets

## 7. MANIPULATION ET CONSERVATION

P402 Stocker dans un endroit sec. P405 Entreposer dans un endroit verrouillé.

## 8. EXPOSITION/PROTECTION INDIVIDUELLE

Moyens techniques : Assurer une ventilation forcée adéquate pour maintenir l'exposition en deçà de la valeur limite d'exposition.

Équipement de protection individuelle :

Respiratoire : La ventilation normale est suffisante. Si les limites d'exposition sont dépassées, utiliser un appareil respiratoire agréé NIOSH/MSHA.

Oculaire : Porter des lunettes de protection homologuées munies d'écrans latéraux non perforés.

Cutanée : En cas de contact répété ou prolongé, porter des gants de protection chimique.

Autre : Un bassin oculaire d'urgence ou une source d'eau potable propre devrait être prêt à être utilisé en cas de contact oculaire accidentel.

## 9. PROPRIÉTÉS PHYSIQUES ET CHIMIQUES

Aspect : Effacer  
État de la matière : Liquide  
Solubilité dans l'eau : 100%  
Contenu de VOC : NA

Odeur : Doux  
Concentrer pH : 11.5-12.5  
Dilué pH : NA  
Densité : NA  
Point de congélation/fusion : NA / NA

## 10. STABILITÉ ET RÉACTIVITÉ

Stabilité : Stable  
Polymérisation dangereuse : Ne se produira pas.  
Conditions à éviter : Ne pas mélanger avec d'autres produits chimiques.  
Incompatibilité : Aucune connue  
Produits de décomposition dangereuse : Monoxyde de carbone, dioxyde de carbone.

## 11. INFORMATIONS TOXICOLOGIQUES

Ce produit ne contient aucun ingrédient déclaré cancérigène humain à des teneurs supérieures ou égales à 0,1 %.

<u>Ingrédients dangereux</u>	<u>Numéro CAS</u>	<u>LD50</u>	<u>LC50</u>
Nitrite de sodium	7632-00-0	180 mg/kg (oral rat)	7,5 ppm/48 hr (mosquito fish)
Sodium Molybdate Dihydrate	10102-40-6	NE	7600 mg/l, acute 96 hr, rainbow trout
Sodium Tolytriazole	64665-57-2	NE	NE
Sodium Hydroxide	1310-73-2	40 mg/Kg (oral mouse); 500 mg/kg (oral rabbit)	179 mg/l/96 hr (flathead minnow)

## 12. INFORMATIONS ÉCOLOGIQUES

Ce produit est toxique pour les poissons.

## 13. DESTRUCTION

P501 Éliminer le contenant conformément à tous les règlements fédéraux, d'État et locales en matière d'élimination des déchets.

## 14. TRANSPORT

INFORMATION DE TRANSPORT D.O.T. : non réglementé.  
TMD AU CANADA : non réglementé.  
Pour les expéditions internationales par Air : non réglementé.  
Pour les expéditions internationales par Vessel : non réglementé.

## 15. INFORMATIONS RÉGLEMENTAIRES

TSCA : Tous les ingrédients contenus dans ce produit figurent ou sont exempts de figurer sur l'inventaire du TSCA.  
CEPA : Tous les ingrédients contenus dans ce produit figurent ou sont exempts de figurer sur la LIS et la LES (Canada).  
Proposition 65 : Ce produit ne contient aucune substance chimique reconnus dans l'État de Californie pour causer le cancer, des malformations congénitales ou d'autres problèmes de reproduction.  
SARA 313 : Ce produit contient les substances chimiques suivantes devant être déclarées aux termes de la section 313 de la loi Emergency Planning and Community Right-To-Know Act de 1986 (40CFR372) : sodium nitrite CAS No 7632-00-0 less than 10%

CLASSIFICATION HMIS : SANTÉ = 2 INFLAMMABILITÉ = 0 RÉACTIVITÉ = 0 EPS = B

CLASSIFICATION SIMDUT : Voir les risques identifiés dans la section 2 ci-dessus.

## 16. AUTRES INFORMATIONS

néant = Non disponible ou sans objet  
n.e. = Non établi

Lire et suivre toutes les instructions et les précautions d'emploi figurant sur l'étiquette avant d'utiliser le produit. Ces produits sont réservés uniquement à l'usage industriel et par les collectivités. CES PRODUITS NE SONT PAS DESTINÉS À L'USAGE DOMESTIQUE OU À LA REVENTE. GARDER HORS DE LA PORTÉE DES ENFANTS. Bien qu'à notre avis les informations énoncées ci-dessus soient réelles et que le jugement exprimé soit celui d'experts qualifiés, elles ne doivent pas être considérées comme une garantie ou une déclaration pour lesquelles la société assume une responsabilité légale. Ces informations sont données uniquement pour examen, investigation et vérification. L'utilisation des ces informations doit être déterminée par l'utilisateur conformément à la réglementation et à la loi fédérales, d'État et régionales applicables.

INFORMATIONS SUR LA SANTÉ ET LA SÉCURITÉ : (216) 861-7114

Date de Préparation: 06/21/2019 Remplace : 08/11/2014

# PLANILLA DE DATOS DE SEGURIDAD

## State Industrial Products

5915 Landerbrook Drive  
Mayfield Heights, OH 44124  
To Order Call: 1-866-747-2229

6935 Davand Drive  
Mississauga, Ontario L5T 1L5  
To Order Call: 1-800-668-6513

Royal Industrial Park, Bldg "M"  
Local #5, Carr 869, km 1.5 Palmas  
Cataño, P.R. 00962  
To Order Call: 787-275-3185



## 1. PRODUCTO QUÍMICO Y DATOS DE LA COMPAÑÍA

Nombre del producto: HWS-135

Descripción del producto: Un producto del tratamiento de aguas del lazo cerrado.

EPA Registration Number: NA

Núm. CHEMTREC las 24 horas: 800-424-9300

Número MSDS: 124735

EPA Establishment Number: NA

## 2. ENUMERACIÓN DE PELIGROS

### \*\*\*DESCRIPCIÓN GENERAL DE LAS SITUACIONES DE EMERGENCIA\*\*\*



Corrosivo



Signo de exclamación



Salud Humana

### PELIGRO

H314 Provoca quemaduras graves en la piel y lesiones oculares graves. H319\_3 Provoca irritación ocular grave. H305\_3 Puede ser nocivo en caso de ingestión y penetración en las vías respiratorias. H302 Nocivo en caso de ingestión.

P261 Evitar respirar humo. P264 Lavar la piel meticulosamente después de la manipulación. P270 No comer, beber ni fumar durante su utilización. P280 Llevar guantes protectores, ropa protectora, protección en los ojos.

## 3. COMPOSICIÓN/INFORMACIÓN SOBRE LOS COMPONENTES

Componentes peligrosos	Número CAS	Peso	ACGIH	OSHA
Nitrito de Sodio	7632-00-0	<10.0%	NE	NE
Sodium Molybdate Dihydrate	10102-40-6	<2.0%	0.5 mg/m <sup>3</sup> TWA	5 mg/m <sup>3</sup> PEL
Sodium Tolytriazole	64665-57-2	<1.0%	NE	NE
Hidróxido de Sodio	1310-73-2	<1.0%	2 mg/m <sup>3</sup>	2 mg/m <sup>3</sup>

The exact percentages have  
been withheld as a trade secret.

## 4. MEDIDAS DE PRIMEROS AUXILIOS

P301\_3+P310\_3+P331\_3 EN CASO DE INGESTIÓN: Llamar inmediatamente al Centro Nacional de Toxicología o médico. NO provoque el vómito. P301+P312 EN CASO DE INGESTIÓN: Llamar a un CENTRO DE TOXICOLOGÍA o médico SI se siente indispuesto. P301+P330+P331 EN CASO DE INGESTIÓN: Limpie la boca. NO provoque el vómito. P302+P352 EN CASO DE CONTACTO CON LA PIEL: Lavar con agua y jabón abundantes. P304+P340 EN CASO DE INHALACIÓN: Lleve a la víctima al aire fresco y Mantenga descansando en una posición cómoda para respirar. P305+P351+P338 EN CASO DE CONTACTO CON LOS OJOS: Aclarar cuidadosamente con agua durante varios minutos. Quitar las lentes de contacto, si lleva y resulta fácil. Seguir aclarando. P332+P313 En caso de irritación cutánea: Consultar a un médico. P337+P313 Si persiste la irritación ocular: Consultar a un médico.

## 5. MEDIDAS PARA COMBATIR INCENDIOS

Pto. inflamabilidad: Ninguno para el punto de ebullición

Límite explosivo inferior (LEL): NA Límite explosivo superior (UEL): NA Temperatura de autoignición: NA

Inflamabilidad: No se espera ninguna.

Medio extinguidor: Dióxido de carbono, productos químicos en polvo, espuma.

Instrucciones para combatir el fuego: Use un aparato de respiración independiente con indumentaria de protección total.

## 6. MEDIDAS EN CASO DE DERRAME ACCIDENTAL

Ventile el área. Coloque una barrera física y contenga el derrame en el propio sitio de origen. Limpie el derrame con agua en abundancia y vierta todo por el drenaje. Obedezca todos los reglamentos federales, estatales y locales relativos a la disposición final de residuos.

## 7. MANIPULACIÓN Y ALMACENAMIENTO

P402 Almacenar en un lugar seco. P405 Almacenar bajo llave.

## 8. CONTROL DE EXPOSICIÓN/PROTECCIÓN PERSONAL

Controles de ingeniería: Proveer suficiente ventilación mecánica para mantener la exposición por debajo del límite de concentración máxima (Threshold Limit Value, TLV).

Equipo de protección personal:

Respiratorio: Si el límite de exposición en el lugar de trabajo es excedido, se aconseja el uso de un respirador de aire ante la ausencia de control ambiental.

Ojos: Use gafas protectoras o gafas con protección lateral sin perforaciones aprobadas.

Piel: Si el contacto fuera prolongado o repetido, use guantes resistentes a productos químicos.

Otros: Una estación de lavabos de emergencia o una fuente de agua potable limpia debe estar disponible en caso de contacto accidental con los ojos.

## 9. PROPIEDADES FÍSICAS Y QUÍMICAS

Aspecto: Claro

Olor: Leve

Estado de agregación: Líquido  
Solubilidad en agua: 100%  
Contenido de VOC: NA

Concentrarse pH: 11.5-12.5  
Diluido pH: NA  
Peso específico: 1.04  
Punto de congelación/fusión: NA / NA

## 10. ESTABILIDAD Y REACTIVIDAD

Estabilidad: Estable

Polimerización peligrosa: No ocurrirá.

Condiciones a evitar: No mezcle con otros productos químicos.

Incompatibilidad: Agentes oxidantes.

Productos de descomposición peligrosos: Monóxido de carbono, Dióxido de carbono.

## 11. INFORMACIÓN TOXICOLÓGICA

Este producto no contiene ningún componente en 0.1% o más del que se señale como un carcinógeno humano.

<u>Componentes peligrosos</u>	<u>Número CAS</u>	<u>LD50</u>	<u>LC50</u>
Nitrito de Sodio	7632-00-0	180 mg/kg (oral rat)	7,5 ppm/48 hr (mosquito fish)
Sodium Molybdate Dihydrate	10102-40-6	NE	7600 mg/l, acute 96 hr, rainbow trout
Sodium Tolytriazole	64665-57-2	NE	NE
Hidróxido de Sodio	1310-73-2	40 mg/Kg (oral mouse); 500 mg/kg (oral rabbit)	179 mg/l/96 hr (flathead minnow)

## 12. INFORMACIÓN ECOLÓGICA

Este producto es tóxico para los peces.

## 13. SUGERENCIAS PARA SU DISPOSICIÓN FINAL

P501 Elimine el recipiente en conformidad con todas las regulaciones federales, estatales y locales relacionadas con la eliminación de residuos.

## 14. INFORMACIÓN SOBRE TRANSPORTE

DATOS DE EMBARQUE SEGÚN EL DOT (Ministerio de Transporte de los EE.UU.): No se ha regulado.

TDG CANADIENSE: Producto no regulado. No se ha regulado.

Para los envíos internacionales de Air: No se ha regulado.

Para los envíos internacionales de Vessel: No se ha regulado.

## 15. INFORMACIÓN SOBRE REGLAMENTOS

TSCA: Todos los químicos de este producto están catalogados o están exentos de ser catalogados en el inventario químico de la Ley de Control de Sustancias Tóxicas (Toxic Substances Control Act, TSCA).

CEPA: Todos los químicos de este producto están catalogados o están exentos de ser catalogados en el DSL/NDL canadiense.

Propuesta 65: Este producto no contiene sustancias registradas en el Estado de California como causante de cáncer, defectos de nacimiento u otros daños reproductivos.

SARA 313: Este producto contiene las siguientes sustancias tóxicas sujetas a los requisitos de presentación de informes de la sección 313 de la Ley de Planificación de Emergencias y Derecho a Saber de la Comunidad de 1986 (sección 372 del Título 40 del Código de Reglamentos Federales): sodium nitrite CAS No 7632-00-0 less than 10%

CLASIFICACIÓN HMIS: SALUD = 2 INFLAMABILIDAD = 0 REACTIVIDAD = 0 EQUIPO DE PROTECCIÓN PERSONAL = B

CLASIFICACIÓN WHMIS: Ver los riesgos identificados en la Sección 2 anterior.

## 16. OTRA INFORMACIÓN

NA = No disponible o No se aplica

NE = No se ha establecido

Antes de utilizar este producto, lea y obedezca todas las instrucciones y precauciones. Este producto fue formulado para utilizarse únicamente en el ámbito industrial e institucional. NO ES PARA REVENTA NI PARA USO EN EL ÁMBITO HOGAREÑO. MANTENGA FUERA DEL ALCANCE DE LOS NIÑOS. Si bien se considera que los datos contenidos en esta planilla son correctos y las opiniones expresadas son las de calificados expertos, los datos no deberán considerarse como garantía ni como declaración por las que la compañía asume responsabilidad legal alguna. Estos datos se brindan sólo para evaluación, investigación y verificación por parte del cliente. El usuario es quien deberá determinar si cualquier uso que se dé a estos datos e información está de acuerdo con las leyes y reglamentos federales, estatales y locales aplicables.

INFORMACIÓN DE SEGURIDAD Y SALUD: (216) 861-7114

Preparado Encendido: 06/21/2019

Reemplaza: 08/11/2014

**Safety Data Sheet**  
according to 29CFR1910/1200 and GHS Rev. 3

**Effective date :** 01.12.2015

**Hydrochloric Acid 36mL/L**

**SECTION 1: Identification of the substance/mixture and of the supplier**

**Product name:** Hydrochloric Acid 36mL/L

**Manufacturer/Supplier Trade name:**

**Manufacturer/Supplier Article number:** HA6113-G

**Recommended uses of the product and restrictions on use:**

**Manufacturer Details:**

AquaPhoenix Scientific, Inc.  
9 Barnhart Drive  
Hanover, PA 17331  
1-717-632-1291

**Supplier Details:**

AquaPhoenix Scientific, Inc  
9 Barnhart Drive, Hanover, PA 17331  
(717) 632-1291

**Emergency telephone number:**

**ChemTel: (24-hour) (US and Canada)**  
1-(800)-255-3924

**SECTION 2: Hazards Identification**

**Classification of the substance or mixture:**



**Corrosive**

Corrosive to metals, category 1  
Skin corrosion, category 1B  
Serious eye damage, category 1



**Irritant**

Specific target organ toxicity following single exposure, category 3

Corr Metals. 1.  
Skin Corr. 1B.  
Eye Damage. 1.  
Stot SE. 3.

**Signal word:** None

**Hazard statements:**

May be corrosive to metals.  
Causes severe skin burns and eye damage.  
May cause respiratory irritation.  
Causes serious eye damage.

**Precautionary statements:**

If medical advice is needed have product container or label at hand.  
Keep out of reach of children.  
Read label before use.  
Keep only in original container.  
Avoid breathing dust/fume/gas/mist/vapours/spray.  
Wash thoroughly after handling.

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**Hydrochloric Acid 36mL/L**

Use only outdoors or in a well-ventilated area.  
Wear protective gloves/protective clothing/eye protection/face protection.  
IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.  
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.  
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. Continue rinsing.  
Immediately call a POISON CENTER or doctor/physician.  
Specific treatment (see supplemental first aid instructions on this label).  
Wash contaminated clothing before reuse.  
Absorb spillage to prevent material damage.  
Store in a well ventilated place. Keep container tightly closed.  
Store locked up.  
Store in a corrosive resistant container with a resistant inner liner.  
Dispose of contents/container.

**Other Non-GHS Classification:** None

**SECTION 3: Composition/information on ingredients**

**Ingredients:**

Ingredients:		
CAS 7647-01-0	Hydrochloric Acid, ACS	4.25 %
CAS 7732-18-5	Deionized Water	99.75 %
Percentages are by weight		

**SECTION 4: First aid measures**

**Description of first aid measures**

**After inhalation:**

Loosen clothing as necessary and position individual in a comfortable position. Move exposed to fresh air. Give artificial respiration if necessary. If breathing is difficult give oxygen. Consult a physician.

**After skin contact:**

Rinse hands with water for 20 minutes. Enter emergency shower rinsing while removing contaminated clothing and shoes. Immediately seek medical attention.

**After eye contact:**

Protect unexposed eye. Remove contact lenses, if present and easy to do, and continue rinsing. Continue rinsing eyes during transport to hospital. Immediately seek medical attention.

**After swallowing:**

Rinse mouth thoroughly. Do not induce vomiting. Never give anything by mouth to an unconscious person. Consult a physician.

**Most important symptoms and effects, both acute and delayed:**

Headache. Nausea. Shortness of breath. Irritation/burns, all routes of exposure. Spasm, inflammation and edema of the larynx. Inflammation and edema of the bronchi, pneumonitis, pulmonary edema. Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin. ( Hydrochloric acid ).

**Indication of any immediate medical attention and special treatment needed:**

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**Hydrochloric Acid 36mL/L**

If seeking medical attention provide SDS document to physician. Physician should treat symptomatically.

**SECTION 5: Firefighting measures**

**Extinguishing media**

**Suitable extinguishing agents:**

Use water, dry chemical, chemical foam, carbon dioxide, or alcohol-resistant foam.

**Unsuitable extinguishing agents:** None

**Special hazards arising from the substance or mixture:**

Hydrogen chloride gas may be released.

**Advice for firefighters:**

**Protective equipment:**

Wear protective eyewear, gloves, and clothing. Poisonous gas may be produced in fire. Refer to Section 8.

**Additional information (precautions):**

Avoid inhaling gases, fumes, dust, mist, vapor, and aerosols. Avoid contact with skin, eyes, and clothing. Dust deposits should not be allowed to accumulate on surfaces.

**SECTION 6: Accidental release measures**

**Personal precautions, protective equipment and emergency procedures:**

Ensure adequate ventilation. Ensure that air-handling systems are operational.

**Environmental precautions:**

Should not be released into environment. Prevent from reaching drains, sewer, or waterway.

**Methods and material for containment and cleaning up:**

Wear protective eyewear, gloves, and clothing. Follow advice and precautions. If necessary use trained response staff or contractor. Absorb with suitable absorbent material such as sand or earth and containerize for disposal. Refer to Section 13. Sweep up and containerize for disposal. Avoid generating dust. Refer to Section 8. Refer to Section 5.

**Reference to other sections:** None

**SECTION 7: Handling and storage**

**Precautions for safe handling:**

Avoid contact with skin, eyes, and clothing. Follow good hygiene procedures when handling chemical materials. Refer to Section 8. Follow proper disposal methods. Wash hands after handling. Avoid contact with skin and eyes. Handle in accordance with good industrial hygiene and safety practice. Wear protective equipment. See Section 8. Refer to Section 13.

**Conditions for safe storage, including any incompatibilities:**

Store in a cool location. Store with like hazards. Keep away from open flames, hot surfaces, and sources of ignition. Keep away from food and beverages. Protect from freezing and physical damage. Provide ventilation for containers. Keep container tightly closed. Store away from incompatible materials.

**SECTION 8: Exposure controls/personal protection**



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**Hydrochloric Acid 36mL/L**

<b>Control parameters:</b>	7647-01-0, Hydrochloric Acid, C 2 ppm USA. ACGIH. 7647-01-0, Hydrochloric Acid, C 5 ppm 7 mg/m3 USA. NIOSH. 7647-01-0, Hydrochloric Acid, C 5 ppm 7 mg/m3 USA. OSHA.
<b>Appropriate engineering controls:</b>	Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use or handling. Use under fume hood designed for hazardous chemicals with an average face velocity of 100 feet per minute or greater. Ensure that evacuation/ventilation systems are designed to prevent the escape of dust/mist/aerosols into the work area.
<b>Respiratory protection:</b>	Not required under normal conditions of use. Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. When necessary use NIOSH approved breathing equipment.
<b>Protection of skin:</b>	Select glove material impermeable and resistant to the substance. Select glove material based on rates of diffusion and degradation. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Use proper glove removal technique without touching outer surface. Avoid skin contact with used gloves. Wear protective clothing. Complete suit protecting against chemicals. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
<b>Eye protection:</b>	Wear equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Wear tightly fitting safety goggles and a faceshield (8-inch minimum).
<b>General hygienic measures:</b>	Wash hands before breaks and at the end of work. Perform routine housekeeping to prevent dust generation. Avoid contact with skin, eyes, and clothing. Before wearing wash contaminated clothing.

**SECTION 9: Physical and chemical properties**

<b>Appearance (physical state, color):</b>	Clear colorless liquid	<b>Explosion limit lower:</b>	Not determined
<b>Odor:</b>	Pungent	<b>Explosion limit upper:</b>	Not determined
<b>Odor threshold:</b>	Not determined	<b>Vapor pressure at 20°C:</b>	Not determined
<b>pH-value:</b>	< 1	<b>Vapor density:</b>	Not determined
<b>Melting/Freezing point:</b>	Not determined	<b>Relative density:</b>	Not determined
<b>Boiling point/Boiling range:</b>	Not determined	<b>Solubilities:</b>	Soluble in water.
<b>Flash point (closed cup):</b>	Not determined	<b>Partition coefficient (n-octanol/water):</b>	Not determined
<b>Evaporation rate:</b>	> 1	<b>Auto/Self-ignition temperature:</b>	Not determined
<b>Flammability (solid, gaseous):</b>	Not determined	<b>Decomposition temperature:</b>	Not determined
<b>Density at 20°C:</b>	Not determined	<b>Viscosity:</b>	a. Kinematic: Not determined b. Dynamic: Not determined

**SECTION 10: Stability and reactivity**

<b>Reactivity:</b>	Nonreactive under normal conditions.
<b>Chemical stability:</b>	

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**Hydrochloric Acid 36mL/L**

Stable under normal conditions.

**Possible hazardous reactions:** None

**Conditions to avoid:**

Incompatible materials. Excess heat.

**Incompatible materials:**

Most metals, alkalis, cyanides, sulfides, sulfites, metal oxides, formaldehydes.

**Hazardous decomposition products:**

Fumes of hydrogen chloride and hydrogen in contact with metals. Chloride gas from oxidizers.

**SECTION 11: Toxicological information**

**Acute Toxicity:**

**Chronic Toxicity:** No additional information.

**Skin corrosion/irritation:**

: Skin - rabbit Result: Causes burns. 7647-01-0.

**Serious eye damage/irritation:**

: Eyes - rabbit (Hydrochloric acid) Result: Corrosive to eyes 7647-01-0.

**Respiratory or skin sensitization:** No additional information.

**Carcinogenicity:** No additional information.

**Germ cell mutagenicity:** No additional information.

**Reproductive Toxicity:** No additional information.

**STOT-single and repeated exposure:**

: 7647-01-0: The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with respiratory tract irritation. ( Hydrochloric acid ).

**Additional toxicological information:** No additional information.

**SECTION 12: Ecological information**

**Ecotoxicity:**

: Toxicity to fish LC50 - Gambusia affinis (Mosquito fish) - 282 mg/l - 96 h (Hydrochloric acid), 7647-01-0.

**Persistence and degradability:** No additional information.

**Bioaccumulative potential:** No additional information.

**Mobility in soil:** No additional information.

**Other adverse effects:** No additional information.

**SECTION 13: Disposal considerations**

**Waste disposal recommendations:**

Treat the solid residue as normal refuse. Contact a licensed professional waste disposal service to dispose of this material. Dispose of empty containers as unused product. Product or containers must not be disposed with household garbage. It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities (US 40CFR262.11). 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. Ensure complete and accurate classification. Cover

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**Hydrochloric Acid 36mL/L**

spill with soda ash or calcium carbonate. Mix and add water to form slurry. Decant to drain.

**SECTION 14: Transport information**

**US DOT**

**UN Number:**

ADR, ADN, DOT, IMDG, IATA

1789

**Limited Quantity Exception:**

None

**Bulk:**

**RQ (if applicable):** None

**Proper shipping Name:** Hydrochloric acid.

**Hazard Class:** 8

**Packing Group:** III.

**Marine Pollutant (if applicable):** No additional information.

**Comments:** None

**Non Bulk:**

**RQ (if applicable):** None

**Proper shipping Name:** Hydrochloric acid.

**Hazard Class:** 8

**Packing Group:** III.

**Marine Pollutant (if applicable):** No additional information.

**Comments:** None



**SECTION 15: Regulatory information**

**United States (USA)**

**SARA Section 311/312 (Specific toxic chemical listings):**

Acute

**SARA Section 313 (Specific toxic chemical listings):**

7647-01-0 Hydrochloric acid.

**RCRA (hazardous waste code):**

None of the ingredients are listed.

**TSCA (Toxic Substances Control Act):**

All ingredients are listed.

**CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act):**

7647-01-0 Hydrochloric acid 5000 lb.

**Proposition 65 (California):**

**Chemicals known to cause cancer:**

None of the ingredients are listed.

**Chemicals known to cause reproductive toxicity for females:**

None of the ingredients are listed.

**Chemicals known to cause reproductive toxicity for males:**

None of the ingredients are listed.

**Chemicals known to cause developmental toxicity:**

None of the ingredients are listed.

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**Hydrochloric Acid 36mL/L**

**Canada**

**Canadian Domestic Substances List (DSL):**

All ingredients are listed.

**SECTION 16: Other information**

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. Note. 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

**GHS Full Text Phrases:** None

**Abbreviations and Acronyms:**

IMDG International Maritime Code for Dangerous Goods.  
PNEC. Predicted No-Effect Concentration (REACH).  
CFR Code of Federal Regulations (USA).  
SARA Superfund Amendments and Reauthorization Act (USA).  
RCRA. Resource Conservation and Recovery Act (USA).  
TSCA. Toxic Substances Control Act (USA).  
NPRI National Pollutant Release Inventory (Canada).  
DOT US Department of Transportation.  
IATA International Air Transport Association.  
GHS Globally Harmonized System of Classification and Labelling of Chemicals.  
ACGIH American Conference of Governmental Industrial Hygienists.  
CAS Chemical Abstracts Service (division of the American Chemical Society).  
NFPA National Fire Protection Association (USA).  
HMIS Hazardous Materials Identification System (USA).  
WHMIS Workplace Hazardous Materials Information System (Canada).  
DNEL Derived No-Effect Level (REACH).

## MATERIAL SAFETY DATA SHEET

ID # 121-2

10/17/94

CHEMICAL NAME & SYNONYMS -	6.0M Hydrochloric acid; Solution No.1, Hydrochloric acid, dilute Hydrochloric acid
CAS No.(s) -	7732-18-5 7647-01-0
USED IN LAB-AIDS KITS # (s) -	82, 83, 84, 121
FORMULA -	HCL
FORMULA WEIGHT (F.W.) -	Mixture
PHYSICAL DATA - (DENSITY, SOLUBILITY, ETC.)	6.0M solution Hydrochloric acid
APPEARANCE AND ODOR -	Clear liquid, strong pungent odor
INCOMPATIBILITY - (MATERIALS TO AVOID)	Strong oxidants
DOT CLASS -	Corrosive liquid
REACTIVITY -	Stable
CONDITIONS TO AVOID- (IF ANY)	Strong oxidants Avoid breathing vapor; Avoid body contact
HEALTH HAZARDS - (IF ANY)	Irritant to body tissues Fumes harmful
TOLERANCE LIMIT VALUE (TLV) (IF ESTABLISHED) -	10ppm
FIRE HAZARDS - (IF ANY)	Non flammable
SPILLS AND LEAKS -	Absorb on sand or vermiculite. Place in suitable container.
DISPOSAL METHOD -	Dilute with 20X water. Add 1M sodium carbonate solution and flush in drain.
SPECIAL PRECAUTIONS - (IF ANY)	Chemical gloves and goggles. Fume hood.
FIRST AID - (IF SUBSTANCE DANGEROUS)	External: Wash affected parts with plenty of water For Eyes: Wash continuously for 15 min., see physician Internal: If ingested wash mouth and consult a physician

## Hydrochloric Acid 6.0N

### 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Name:** Hydrochloric Acid 6.0N

**Synonyms/Generic Names:** None

**Product Number:** 8812

**Product Use:** Industrial, Manufacturing or Laboratory use

**Manufacturer:** Columbus Chemical Industries, Inc.  
N4335 Temkin Rd.  
Columbus, WI. 53925

**For More Information Call:** 920-623-2140 (Monday-Friday 8:00-4:30)

**In Case of Emergency Call:** CHEMTREC - 800-424-9300 or 703-527-3887 (24 Hours/Day, 7 Days/Week)

### 2. HAZARDS IDENTIFICATION

**OSHA Hazards:** Toxic by inhalation, Harmful by ingestion, Corrosive

**Target Organs:** None

**Signal Words:** Danger

**Pictograms:**



**GHS Classification:**

Acute toxicity, Oral	Category 5
Acute toxicity, Inhalation	Category 4
Skin corrosion	Category 1B
Serious eye damage	Category 1
Specific target organ toxicity-single exposure	Category 3

**GHS Label Elements, including precautionary statements:**

**Hazard Statements:**

H303	May be harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.

**Precautionary Statements:**

P261	Avoid breathing dust/fume/gas/mist/vapors/spray.
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 so. Continue rinsing.
P310	Immediately call a POISON CENTER or doctor/physician.

**Potential Health Effects**

<b>Eyes</b>	Causes eye burns.
<b>Inhalation</b>	May be harmful if inhaled. Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract.
<b>Skin</b>	Harmful if absorbed through skin. Causes skin burns.
<b>Ingestion</b>	Harmful if swallowed.

**NFPA Ratings**

<b>Health</b>	3
<b>Flammability</b>	0
<b>Reactivity</b>	0
<b>Specific hazard</b>	Not Available

**HMIS Ratings**

<b>Health</b>	3
<b>Fire</b>	0
<b>Reactivity</b>	0
<b>Personal</b>	J

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

Component	Weight %	CAS #	EINECS# / ELINCS#	Formula	Molecular Weight
Hydrochloric Acid	22	7647-01-0	231-595-7	HCl	36.46 g/mol
Water	Balance	7732-18-5	231-791-2	H <sub>2</sub> O	18.00 g/mol

**4. FIRST-AID MEASURES**

<b>Eyes</b>	In case of eye contact, rinse with plenty of water and seek medical attention immediately.
<b>Inhalation</b>	Move casualty to fresh air and keep at rest. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention immediately.
<b>Skin</b>	Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing and wash using soap. Get medical attention immediately.
<b>Ingestion</b>	<b>Do Not Induce Vomiting!</b> Never give anything by mouth to an unconscious person. If conscious, wash out mouth with water. Get medical attention immediately.

**5. FIRE-FIGHTING MEASURES**

<b>Suitable (and unsuitable) extinguishing media</b>	Product is not flammable. Use appropriate media for adjacent fire. Cool containers with water.
<b>Special protective equipment and precautions for firefighters</b>	Wear self-contained, approved breathing apparatus and full protective clothing, including eye protection and boots.
<b>Specific hazards arising from the chemical</b>	Emits toxic (hydrogen chloride gas) fumes under fire conditions. (See also Stability and Reactivity section).

## 6. ACCIDENTAL RELEASE MEASURES

<b>Personal precautions, protective equipment and emergency procedures</b>	See section 8 for recommendations on the use of personal protective equipment.
<b>Environmental precautions</b>	Prevent spillage from entering drains. Any release to the environment may be subject to federal/national or local reporting requirements.
<b>Methods and materials for containment and cleaning up</b>	Prevent spillage from entering drains. Neutralize spill with sodium bicarbonate or lime. Absorb spill with noncombustible absorbent material, then place in a suitable container for disposal. Clean surfaces thoroughly with water to remove residual contamination. Dispose of all waste and cleanup materials in accordance with regulations.

## 7. HANDLING AND STORAGE

### Precautions for safe handling

See section 8 for recommendations on the use of personal protective equipment. Use with adequate ventilation. Wash thoroughly after using. Keep container closed when not in use. Avoid formation of aerosols.

### Conditions for safe storage, including any incompatibilities

Store in cool, dry well ventilated area. Keep away from incompatible materials (see section 10 for incompatibilities).

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### Occupational exposure controls:

Component	Exposure Limits	Basis	Entity
Hydrogen Chloride	2 ppm 2.98 mg/m <sup>3</sup>	CEIL	ACGIH
	5 ppm 7 mg/m <sup>3</sup>	CEIL	OSHA
	5 ppm 7 mg/m <sup>3</sup>	CEIL	NIOSH
	50 ppm	IDLH	OSHA

TWA: Time Weighted Average over 8 hours of work.

TLV: Threshold Limit Value over 8 hours of work.

REL: Recommended Exposure Limit

PEL: Permissible Exposure Limit

STEL: Short Term Exposure Limit during x minutes.

IDLH: Immediately Dangerous to Life or Health

WEEL: Workplace Environmental Exposure Levels

CEIL: Ceiling

### Personal Protection

<b>Eyes</b>	Wear chemical safety glasses or goggles.
<b>Inhalation</b>	Provide local exhaust, preferably mechanical. If exposure levels are excessive, use an approved respirator.
<b>Skin</b>	Wear nitrile or rubber gloves, apron or lab coat.
<b>Other</b>	Not Available

**Other Recommendations**

Provide eyewash stations, quick-drench showers and washing facilities accessible to areas of use and handling.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

Appearance (physical state, color, etc.)	Light yellow liquid.
Odor	Strong, pungent odor.
Odor threshold	0.25-10 ppm
pH	Acidic.
Melting point/freezing point	Not Available
Initial boiling point and boiling range	Lowest known value: 100°C (212°F)
Flash point	Not Flammable
Evaporation rate	Not Available
Flammability (solid, gas)	Not Flammable
Upper/lower flammability or explosive limit	Not Explosive
Vapor pressure	227 hPa (170 mmHg) at 21.1°C (70°F) 547 hPa (410 mmHg) at 37.7°C (99.9°F)
Vapor density	Highest known: 0.67 (air=1)
Density	Weighted average: 1.01 g/cm <sup>3</sup>
Solubility (ies)	Soluble in water, methanol.
Partition coefficient: n-octanol/water	Not Available
Auto-ignition temperature	Not Available
Decomposition temperature	Not Available

**10. STABILITY AND REACTIVITY**

Chemical Stability	Stable
Possibility of Hazardous Reactions	Will not occur.
Conditions to Avoid	Not Available
Incompatible Materials	Metals, oxidizing agents, organic materials, alkalis, water.
Hazardous Decomposition Products	Hydrogen chloride gas.

**11. TOXICOLOGICAL INFORMATION****Acute Toxicity**

Skin	Not Available
Eyes	Not Available
Respiratory	Not Available
Ingestion	LD50 – Rabbit – 900 mg/kg

**Carcinogenicity**

IARC	3: Not classifiable as to its carcinogenicity to humans
ACGIH	A4: Not classifiable as a human carcinogen.
NTP	No components of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
OSHA	No components of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**Signs & Symptoms of Exposure**

<b>Skin</b>	Irritation and burns.
<b>Eyes</b>	Severe eye irritation, conjunctivitis, burns, corneal necrosis.
<b>Respiratory</b>	Irritation, pain, inflammation of upper respiratory tract and mucous membranes, coughing, sneezing, choking.
<b>Ingestion</b>	Irritation, burning, ulceration, fever, vomiting, nausea, diarrhea, thirst, difficulty swallowing, salivation.

<b>Chronic Toxicity</b>	May damage organs.
<b>Teratogenicity</b>	Not Available
<b>Mutagenicity</b>	May alter genetic material.
<b>Embryotoxicity</b>	Not Available
<b>Specific Target Organ Toxicity</b>	Kidneys, liver, mucous membranes, upper respiratory tract, skin, eyes, circulatory system, teeth.

**12. ECOLOGICAL INFORMATION****Ecotoxicity**

<b>Aquatic Vertebrate</b>	LC50 – Gambusia affinis – 282 mg/L – 96h
<b>Aquatic Invertebrate</b>	Not Available
<b>Terrestrial</b>	Not Available

<b>Persistence and Degradability</b>	Not Available
<b>Bioaccumulative Potential</b>	Not Available
<b>Mobility in Soil</b>	Not Available
<b>PBT and vPvB Assessment</b>	Not Available
<b>Other Adverse Effects</b>	Not Available

**13. DISPOSAL CONSIDERATIONS**

<b>Waste Residues</b>	Users should review their operations in terms of the applicable federal/national or local regulations and consult with appropriate regulatory agencies if necessary before disposing of waste product container.
<b>Product Containers</b>	Users should review their operations in terms of the applicable federal/national or local regulations and consult with appropriate regulatory agencies if necessary before disposing of waste product container.

The information offered in section 13 is for the product as shipped. Use and/or alterations to the product may significantly change the characteristics of the material and alter the waste classification and proper disposal methods.

**14. TRANSPORTATION INFORMATION**

<b>US DOT</b>	UN1789, Hydrochloric acid, 8, pg II
<b>TDG</b>	UN1789, HYDROCHLORIC ACID, 8, pg II
<b>IMDG</b>	UN1789, HYDROCHLORIC ACID, 8, pg II
<b>Marine Pollutant</b>	No
<b>IATA/ICAO</b>	UN1789, Hydrochloric acid, 8, pg II

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**15. REGULATORY INFORMATION**

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TSCA Inventory Status	All ingredients are listed on the TSCA inventory.
DSCL (EEC)	All ingredients are listed on the DSCL inventory.
California Proposition 65	Not Listed
SARA 302	Not Listed
SARA 304	Not Listed
SARA 311	Acute Health Hazard
SARA 312	Acute Health Hazard
SARA 313	Listed: Hydrochloric Acid
WHMIS Canada	Class D-2A: Material causing other toxic effects (VERY TOXIC). Class E: Corrosive material.

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**16. OTHER INFORMATION**

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Revision	Date
Revision 1	12/04/2012

Disclaimer: Columbus Chemical Industries, Inc. ("Columbus") believes that the information herein is factual but is not intended to be all inclusive. The information relates only to the specific material designated and does not relate to its use in combination with other materials or its use as to any particular process. Because safety standards and regulations are subject to change and because Columbus has no continuing control over the material, those handling, storing or using the material should satisfy themselves that they have current information regarding the particular way the material is handled, stored or used and that the same is done in accordance with federal, state and local law. COLUMBUS MAKES NO WARRANTY, EXPRESS OR IMPLIED, INCLUDING (WITHOUT LIMITATION) WARRANTIES WITH RESPECT TO THE COMPLETENESS OR CONTINUING ACCURACY OF THE INFORMATION CONTAINED HEREIN OR WITH RESPECT TO FITNESS FOR ANY PARTICULAR USE.

# FLINN SCIENTIFIC, INC.

## Safety Data Sheet (SDS)

SDS #: 395.20

Revision Date: March 25, 2014

### SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

#### Hydrochloric Acid Solution, 0.1M - 2.4M

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: Skin corrosion or irritation (Category 1). Causes severe skin burns and eye damage (H314). Do not breathe mist, vapors or spray (P260).

Hazard class: Specific target organ toxicity, single exposure; respiratory tract irritation (Category 3). May cause respiratory irritation (H335).

Hazard class: Acute toxicity, oral (Category 5). May be harmful if swallowed (H303).

Industrial exposure to hydrochloric acid vapors and mists is listed as a known human carcinogen by IARC (IARC-1).

### SECTION 3 — COMPOSITION, INFORMATION ON INGREDIENTS

Component Name	CAS Number	Formula	Formula Weight	Concentration
Hydrochloric acid	7647-01-0	HCl	36.46	2-10%
Water	7732-18-5	H <sub>2</sub> O	18.00	90-98%

### 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). Immediately call a POISON CENTER or physician (P310). **If on skin (or hair):** Immediately remove all contaminated clothing. Rinse skin with water (P303+P361+P353). Wash contaminated clothing before reuse (P363). **If swallowed:** Rinse mouth. Do NOT induce vomiting (P301+P330+P331).

### 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 and contain the spill with sand or other inert absorbent material, neutralize with sodium bicarbonate or calcium hydroxide, 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 #9. Store with acids, except nitric acid. Store in a dedicated acid cabinet; if an acid cabinet is not available, store in Flinn Saf-Cube™. Keep container tightly closed (P233). 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).

Exposure guidelines: (as concentrated HCl) Ceiling 5 ppm (OSHA); Ceiling 2 ppm (ACGIH); IDLH 50 ppm (OSHA). Irritation threshold is ~ 5 ppm so any irritation is sign of exposure (per OSHA)

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**SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES**

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Clear, colorless liquid. Acrid, chlorine odor.

pH: < 1

Soluble: Water and alcohol

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**SECTION 10 — STABILITY AND REACTIVITY**

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Avoid contact with strong oxidizers, bases, amines, and alkali metals. Corrodes metal including stainless steel.

Shelf life: Good, if stored properly.

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**SECTION 11 — TOXICOLOGICAL INFORMATION**

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Acute effects: Eye and skin corrosion. Respiratory irritation, coughing.

Chronic effects: Corrosive to teeth.

Target organs: Respiratory tract, teeth, skin, eyes.

ORL-RBT LD<sub>50</sub>: 900 mg/kg (as concentrated HCl)

IHL-RAT LC<sub>50</sub>: 3124 ppm/1hour (as concentrated HCl)

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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Does not biodegrade in soil, may be toxic to aquatic life.

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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 #24b is one option.

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**SECTION 14 — TRANSPORT INFORMATION**

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Shipping name: Hydrochloric acid. Hazard class: 8, Corrosive. UN number: UN1789.

N/A = Not applicable

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**SECTION 15 — REGULATORY INFORMATION**

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TSCA-listed, EINECS-listed (231-595-7), RCRA code D002.

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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 25, 2014

# Safety Data Sheet

Hydrochloric Acid, 0.1M

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

## Section 1 Product Description

**Product Name:** Hydrochloric Acid, 0.1M  
**Recommended Use:** Science education applications  
**Synonyms:** Muriatic 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 skin irritation. Causes serious eye irritation.

**GHS Classification:**  
Skin Corrosion/Irritation Category 2, Serious Eye Damage/Eye Irritation Category 2

## Section 3 Composition / Information on Ingredients

<u>Chemical Name</u>	<u>CAS #</u>	<u>%</u>
Water	7732-18-5	99.7
Hydrogen Chloride	7647-01-0	0.3

## 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, 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:** Hydrogen chloride

## 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.

# 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. 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>		
	(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:

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

### Formula:

**Molecular Weight:** 36.46 (Hydrogen Chloride)

**Appearance:** Colorless Liquid

**Odor:** Mild Pungent

**Odor Threshold:** No data available

**pH:** 1

**Melting Point:** No data available

**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:** Approx. 1

**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:** No data available

## Section 10

## Reactivity Data

### Reactivity:

Not generally reactive under normal conditions.

### Chemical Stability:

Stable under normal conditions.

### Conditions to Avoid:

None known.

### Incompatible Materials:

Water-reactive materials

### Hazardous Decomposition Products:

Hydrogen chloride

### Hazardous Polymerization:

Will not occur

## Section 11

## Toxicity Data

### Routes of Entry

Inhalation and ingestion.

### Symptoms (Acute):

Respiratory Irritation, Dermatitis

### Delayed Effects:

No data available

### Acute Toxicity:

#### Chemical Name

Water

Hydrogen Chloride

#### CAS Number

7732-18-5

7647-01-0

#### Oral LD50

Not applicable

ORAL LD50 Rat

700 mg/kg

#### Dermal LD50

DERMAL LD50

Rabbit > 5010

mg/kg

#### Inhalation LC50

INHALATION

LC50-1H Rat 3124

ppm

### Carcinogenicity:

#### Chemical Name

#### CAS Number

#### IARC

#### NTP

#### OSHA

Hydrochloric Acid, 0.1M

# Safety Data Sheet

Hydrogen Chloride

7647-01-0

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:** No data available

## Section 12

## Ecological Data

**Overview:** This material is not expected to be harmful to the ecology.  
**Mobility:** This material is expected to have high mobility in soil. It absorbs weakly to most soil types.  
**Persistence:** Dissolved into water, Evaporation into atmosphere, dissolved in water.  
**Bioaccumulation:** Bioconcentration is not expected to occur.  
**Degradability:** No data  
**Other Adverse Effects:** No data

Chemical Name	CAS Number	Eco Toxicity
Hydrogen Chloride	7732-18-5 7647-01-0	96 HR LC50 GAMBUSIA AFFINIS 282 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):** If discarded, this product is considered a RCRA corrosive waste, D002.

## Section 14

## Transport Information

Ground - DOT Proper Shipping Name:	Air - IATA Proper Shipping Name:
Not regulated for transport by US DOT	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
Hydrogen Chloride	7647-01-0	Hydrochloric acid	5000 lb RQ	5000 lb final RQ; (2270 kg)	500 lb TPQ (gas only)	No

## Section 16

## Additional Information

**Revised:** 02/20/2013

**Replaces:** 02/19/2013

**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



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>	HYDROCHLORIC ACID, 1% SOLUTION
<b>Synonyms</b>	Muriatic Acid, Water Solution ; Hydrogen Chloride, Water Solution

## Section 2: Hazard Identification

The dilution of this chemical has not been classified according to the Globally Harmonized System (GHS) of Classification and Labeling of Chemicals.

**Signal word:** WARNING

**Pictograms:** None required

**Target organs:** Respiratory system, skin, eyes, lungs.

### GHS Classification:

Skin irritant (Category 3)

Eye irritant (Category 2B)

### GHS Label information:

#### Hazard statement(s):

H316: Causes mild skin irritation.

H320: Causes eye irritation.

### Precautionary statement(s):

P264: Wash hands thoroughly after handling.

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.

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	99%	231-791-2
Hydrochloric acid	7647-01-0	1%	231-595-7

## 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. 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:** 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. Contact with metals produce hydrogen, which is flammable and may produce explosive mixtures with air.

## 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:** Neutralize spill with sodium bicarbonate or calcium hydroxide, 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 2** Hazard identification

**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 3** Composition/Information on Ingredients

Exposure Limits:	Chemical Name	ACGIH (TLV)	OSHA (PEL)	NIOSH (REL)
	Hydrogen chloride	STEL: C 2 ppm / C 2.98 mg/m <sup>3</sup>	STEL: C 5 ppm / C 7 mg/m <sup>3</sup>	STEL: C 5 ppm / C 7 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 4** Physical and Chemical Properties

<b>Appearance:</b> Clear, colorless liquid. <b>Odor:</b> Pungent odor. <b>Odor threshold:</b> Data not available. <b>pH:</b> N/A <b>Melting / Freezing point:</b> Approx. 0°C (32°F) [water] <b>Boiling point:</b> Approx. 100°C (212°F) [water] <b>Flash point:</b> Not flammable.	<b>Evaporation rate ( = 1):</b> Data not available. <b>Flammability (solid/gas):</b> Data not available. <b>Explosion limits: Upper/Lower:</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> 1.0 [water] <b>Solubility(ies):</b> Soluble in water.	<b>Partition coefficient: (n-octanol / water):</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
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**Section 5** Stability and Reactivity

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

**Conditions to avoid:** Containers may burst when heated. Avoid contact with water.

**Incompatible materials:** Metals, bases, active metals, alkali metals, oxidizing agents, hydroxides, amines, carbonates, cyanides, sulfides, sulfites, formaldehyde.

**Hazardous decomposition products:** Hydrogen chloride gas.

**Section 6** Toxicological Information

**Acute toxicity:** Data not available

**Skin corrosion/irritation:** Data not available at this dilution.

**Serious eye damage/irritation:** Data not available at this dilution.

**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 carcinogen or potential carcinogen by NTP.

**IARC:** Group 3: Not classifiable as to its carcinogenicity 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 at this dilution.

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

**Aspiration hazard:** Data not available

**Potential health effects:** 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.

**Inhalation:** May be harmful if inhaled. Material may cause irritation to the tissue of the mucous membranes and upper respiratory tract.

**Ingestion:** May be harmful if swallowed.

**Skin:** May cause irritation and/or burns.

**Eyes:** May cause irritation and/or burns.

**Signs and symptoms of exposure:** Data not available at this dilution.

**Additional information:** RTECS #: MW4025000 [Hydrochloric acid]

**Section 7** Environmental Information

**Toxicity to fish:** LC50 - Gambusia affinis (Mosquito fish) - 282 mg/l - 96 h (Hydrochloric acid)

**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 8** 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 9** Physical and Chemical Properties

**UN/NA number:** UN1789

**Shipping name:** Hydrochloric acid

**Hazard class:** 8 **Packing group:** III **Reportable Quantity:** No **Marine pollutant:** No **Exceptions:** Limited quantity equal to or less than 5 L.

**Section 10** 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
Hydrochloric acid	Listed	Not listed	D002	Listed	Not listed	E

**Section 11** 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.

## 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** HYDROCHLORIC ACID, 36.5-38%

**Synonyms** Muriatic Acid ; Hydrogen Chloride

## Section 2 Hazards Identification

**Signal word:** DANGER

**Pictograms:** GHS05 / GHS07

**Target organs:** Respiratory system, skin, eyes, lungs.

**GHS Classification:**

Serious eye damage (Category 1)

Skin corr. (Category 1B)

STOT SE (Category 3)

**GHS Label information: Hazard statement(s):**

H314: Causes severe skin burns and eye damage.

H335: May cause respiratory irritation.

**Precautionary statement(s):**

P260: Do not breathe mist/vapours/spray.

P264: Wash hands thoroughly after handling.

P271: Use only outdoors or in a well-ventilated area.

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

P301+P330+P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303+P361+P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

P304+P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

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/physician.

P363: Wash contaminated clothing before reuse.

P403/233: Store in a well-ventilated place. Keep container tightly closed.

P405: Store locked up.

P501: Dispose of contents/container to an approved waste disposal plant.

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

Water	7732-18-5	62-63.5%	231-791-2
Hydrochloric acid	7647-01-0	36.5-38%	231-595-7

## 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:** Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract. Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

**EYE CONTACT:** Causes eye 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:** Causes skin 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:** 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. Contact with metals produce hydrogen, which is flammable and may produce explosive mixtures with air.

## 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:** Neutralize spill with sodium bicarbonate or calcium hydroxide, 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

**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, dry, well-ventilated area away from incompatible substances. Protect from physical damage and sunlight. Protect from moisture.

## Section 8 Exposure Controls / Personal Protection

Exposure Limits:	Chemical Name	ACGIH (TLV)	OSHA (PEL)	NIOSH (REL)
	Hydrogen chloride	STEL: C 2 ppm / C 2.98 mg/m <sup>3</sup>	STEL: C 5 ppm / C 7 mg/m <sup>3</sup>	STEL: C 5 ppm / C 7 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:** Use a chemical fume hood and/or wear a NIOSH/MSHA-approved respirator.

## Section 9 Physical & Chemical Properties

<b>Appearance:</b> Clear, colorless, fuming liquid. <b>Odor:</b> Pungent odor. <b>Odor threshold:</b> Data not available. <b>pH:</b> <1.5 acidic, in solution. <b>Melting / Freezing point:</b> Approx. -45°C (-49°F) <b>Boiling point:</b> 81.11-85°C (178-185°F) <b>Flash point:</b> Not flammable.	<b>Evaporation rate ( = 1):</b> Data not available. <b>Flammability (solid/gas):</b> Data not available. <b>Explosion limits: Upper/Lower:</b> Data not available. <b>Vapor pressure (mm Hg):</b> Approx. 25 @ 20°C (68°F) <b>Vapor density (Air = 1):</b> Data not available. <b>Relative density (Specific gravity):</b> Approx. 1.16 @ 20°C <b>Solubility(ies):</b> Soluble in water.	<b>Partition coefficient: (n-octanol / water):</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> HCl <b>Molecular weight:</b> 36.46
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## Section 10 Stability & Reactivity

**Chemical stability:** Stable

**Hazardous polymerization:** Will not occur.

**Conditions to avoid:** Containers may burst when heated. Avoid contact with water.

**Incompatible materials:** Metals, bases, active metals, alkali metals, oxidizing agents, hydroxides, amines, carbonates, cyanides, sulfides, sulfites, formaldehyde.

**Hazardous decomposition products:** Hydrogen chloride gas.

## Section 11 Toxicological Information

**Acute toxicity:** Data not available

**Skin corrosion/irritation:** Skin-rabbit - causes burns.

**Serious eye damage/irritation:** Eyes-rabbit - Corrosive to eyes.

**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 carcinogen or potential carcinogen by NTP.

**IARC:** Group 3: Not classifiable as to its carcinogenicity 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:** The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with respiratory tract irritation.

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

**Aspiration hazard:** Data not available

**Potential health effects:**

**Inhalation:** May be harmful if inhaled. Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract.

**Ingestion:** May be harmful if swallowed.

**Skin:** May be harmful if absorbed through skin. Causes skin burns.

**Eyes:** Causes eye burns.

**Signs and symptoms of exposure:** Burning sensation, cough, wheezing, laryngitis, shortness of breath, spasm, inflammation and edema of the larynx, spasm, inflammation and edema of the bronchi, pneumonitis, pulmonary edema. Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin.

**Additional information:** RTECS #: MW4025000

## Section 12 Ecological Information

**Toxicity to fish:** LC50 - Gambusia affinis (Mosquito fish) - 282 mg/l - 96 h (Hydrochloric acid)

**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:** UN1789

**Shipping name:** Hydrochloric acid

**Hazard class:** 8 **Packing group:** II **Reportable Quantity:** No **Marine pollutant:** No **Exceptions:** Limited quantity equal to or less than 1 Lt.

## 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
Hydrochloric acid	Listed	Not listed	D002	Listed	Not listed	E; D1A

## 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.

Revision Date: October 2, 2013

Supersedes: February 19, 2011

# Safety Data Sheet

## Hydrochloric Acid, 6M

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

### Section 1 Product Description

**Product Name:** Hydrochloric Acid, 6M  
**Recommended Use:** Science education applications  
**Synonyms:** Muriatic Acid  
**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**



Causes severe skin burns and eye damage. Causes serious eye damage. Toxic if inhaled.

**GHS Classification:**

Skin Corrosion/Irritation Category 1B, Serious Eye Damage/Eye Irritation Category 1, Acute Toxicity - Inhalation Vapor Category 3

### Section 3 Composition / Information on Ingredients

<u>Chemical Name</u>	<u>CAS #</u>	<u>%</u>
Water	7732-18-5	81.4
Hydrogen Chloride	7647-01-0	18.6

### Section 4 First Aid Measures

**Emergency and First Aid Procedures**

**Inhalation:** IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.  
**Eyes:** IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
**Skin Contact:** IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse.  
**Ingestion:** IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

### Section 5 Firefighting Procedures

**Extinguishing Media:** Water fog in flooding quantities. Apply water from as far a distance as possible.  
**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. Flammable Hydrogen gas may be produced over long periods of exposure to Aluminum, Tin, Lead, and Zinc.  
**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. If this material is released into a work area, evacuate the area immediately.

## Section 7

## Handling and Storage

<b>Handling:</b>	Do not breathe dust/fume/gas/mist/vapors/spray. Avoid breathing dust/fume/gas/mist/vapors/spray. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Wear protective gloves/protective clothing/eye protection/face protection.
<b>Storage:</b>	Store in a well-ventilated place. Keep container tightly closed. Store locked up. Suitable for any general chemical storage.
<b>Storage Code:</b>	Keep container tightly closed in a cool, well-ventilated place. White - Corrosive. Separate acids from bases; separate oxidizer acids from organic acids.

## 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>
Hydrogen Chloride	N/A	2 ppm (Ceiling)	N/A	5 ppm (Ceiling)

### Control Parameters

<b>Engineering Measures:</b>	Local exhaust ventilation or other engineering controls are normally required when handling or using this product to avoid overexposure.
<b>Personal Protective Equipment (PPE):</b>	Lab coat, apron, eye wash, safety shower.
<b>Respiratory Protection:</b>	Respiratory protection may be required to avoid overexposure when handling this product. General or local exhaust ventilation is the preferred means of protection. Use a respirator if general room ventilation is not available or sufficient to eliminate symptoms.
<b>Respirator Type(s):</b>	None required where adequate ventilation is provided. If airborne concentrations are above the applicable exposure limits, use NIOSH/MSHA approved respiratory protection.
<b>Eye Protection:</b>	Wear chemical splash goggles when handling this product. Have an eye wash station available.
<b>Skin Protection:</b>	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.
<b>Gloves:</b>	Natural latex,, Butyl rubber, Nitrile, Neoprene

## Section 9

## Physical Data

<b>Formula:</b> See Section 3	<b>Vapor Pressure:</b> No data available
<b>Molecular Weight:</b> 36.46 (Hydrochloric Acid)	<b>Evaporation Rate (BuAc=1):</b> 2.0
<b>Appearance:</b> Colorless Liquid	<b>Vapor Density (Air=1):</b> No data available
<b>Odor:</b> Strong Pungent	<b>Specific Gravity:</b> >1
<b>Odor Threshold:</b> No data available	<b>Solubility in Water:</b> Soluble
<b>pH:</b> -0.7	<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> No data available	<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

<b>Reactivity:</b>	Mildly reactive - See below
<b>Chemical Stability:</b>	Stable under normal conditions.
<b>Conditions to Avoid:</b>	Reaction with water is exothermic.

# Safety Data Sheet

**Incompatible Materials:** Water-reactive materials, Water, Caustics (bases), Oxidizing materials, Acetic anhydride, Amines, Alkanolamines, Isocyanates, Copper, Metals

**Hazardous Decomposition Products:** Hydrogen chloride

**Hazardous Polymerization:** Will not occur

## Section 11

## Toxicity Data

**Routes of Entry:** Inhalation and ingestion.  
**Symptoms (Acute):** Respiratory Irritation  
**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		
Hydrogen Chloride	7647-01-0	Oral LD50 Rabbit 900 mg/kg		INHALATION LC50 Rat 3700 ppm INHALATION LC50 Mouse 1108 ppm INHALATION LC50 Rat 45000 MG/M3 INHALATION LC50 Rat 8300 MG/M3

### Carcinogenicity:

Chemical Name	CAS Number	IARC	NTP	OSHA
Hydrogen Chloride	7647-01-0	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:** Slight ecological hazard. In high concentrations, this product may be dangerous to plants and/or wildlife.

**Mobility:** This material is expected to have high mobility in soil. It absorbs weakly to most soil types.

**Persistence:** Evaporation into atmosphere, dissolved in water.

**Bioaccumulation:** No data

**Degradability:** No data

**Other Adverse Effects:** No data

Chemical Name	CAS Number	Eco Toxicity
Water	7732-18-5	No data available
Hydrogen Chloride	7647-01-0	96 HR LC50 GAMBUSIA AFFINIS 282 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):** If discarded, this product is considered a RCRA corrosive waste, D002.

# Safety Data Sheet

## Section 14

## Transport Information

**Ground - DOT Proper Shipping Name:**  
UN1789Hydrochloric AcidClass 8P.G. II

**Air - IATA Proper Shipping Name:**  
UN1789  
Hydrochloric Acid  
Class 8  
P.G. II

## 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
Hydrogen Chloride	7647-01-0	Hydrochloric acid	5000 lb RQ	5000 lb final RQ; 2270 kg final RQ	500 lb TPQ (gas only)	No

**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

# FLINN SCIENTIFIC, INC.

## Safety Data Sheet (SDS)

SDS #: 395.00

Revision Date: August 12, 2015

### SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

#### Hydrochloric Acid, 6M - 12M (Concentrated)

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: Skin and eye damage, corrosion or irritation (Category 1). Causes severe skin and eye burns and damage (H314+H318). Do not breathe mist, vapors or spray (P260).

Hazard class: Acute toxicity, oral and inhalation (Category 4). Harmful if swallowed or inhaled (H332+H302). Avoid breathing mist, vapors or spray (P261). Do not eat, drink or smoke when using this product (P270).

Hazard class: Corrosive to metals (Category 1). May be corrosive to metals (H290).

Industrial exposure to hydrochloric acid vapors and mists is listed as a known human carcinogen by IARC (IARC-1).

### SECTION 3 — COMPOSITION, INFORMATION ON INGREDIENTS

Component Name	CAS Number	Formula	Formula Weight	Concentration
Hydrochloric acid	7647-01-0	HCl	36.46	20-38%
Water	7732-18-5	H <sub>2</sub> O	18.00	62-80%

### 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 (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 on skin (or hair):** Immediately remove all contaminated clothing. Rinse skin with water (P303+P361+P353). Wash contaminated clothing before reuse (P363). **If swallowed:** Rinse mouth. Do NOT induce vomiting (P301+P330+P331).

### SECTION 5 — FIRE FIGHTING MEASURES

Nonflammable, noncombustible solution.

When heated to decomposition, emits toxic fumes of hydrogen chloride.

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

NFPA Code

H-3

F-0

R-1

### SECTION 6 — ACCIDENTAL RELEASE MEASURES

Ventilate area and contain the spill with sand or other inert absorbent material, neutralize with sodium bicarbonate or calcium hydroxide, and deposit in a sealed bag or container. Absorb spills to prevent material damage (P390). 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 #9. Store with acids, except nitric acid.

Store in a dedicated acid cabinet and away from any source of water; if an acid cabinet is not available, store in Flinn Saf-Cube™. Keep only in original container (P234). Keep container tightly closed (P233). 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).

Exposure guidelines: (as concentrated HCl) Ceiling 5 ppm (OSHA); Ceiling 2 ppm (ACGIH); IDLH 50 ppm. Irritation threshold is ~ 5 ppm so any irritation is sign of exposure (per OSHA)

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**SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES**

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Colorless to pale yellow, fuming liquid. Pungent odor.

pH: < 1

Soluble: Water and alcohol

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**SECTION 10 — STABILITY AND REACTIVITY**

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Avoid contact with strong oxidizers, bases, metals, metal oxides, hydroxides, amines, and other alkaline materials. Incompatible with cyanides, sulfides, and formaldehyde. Corrodes metal, including steel. Produces heat when diluted with water.

Shelf life: Good, if stored properly. See Section 7 for further information.

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**SECTION 11 — TOXICOLOGICAL INFORMATION**

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Acute effects: Eye and skin corrosion. Respiratory irritation, coughing, ulceration of nose and throat.

Chronic effects: Corrosive to teeth.

Target organs: Respiratory tract, teeth, skin, eyes.

ORL-RBT LD<sub>50</sub>: 900 mg/kg

IHL-RAT LC<sub>50</sub>: 3124 ppm/1 hour

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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Does not biodegrade in soil, may be toxic to aquatic life.

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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 #24b is one option.

---

**SECTION 14 — TRANSPORT INFORMATION**

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Shipping name: Hydrochloric acid. Hazard class: 8, Corrosive. UN number: UN1789.

N/A = Not applicable

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**SECTION 15 — REGULATORY INFORMATION**

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TSCA-listed, EINECS-listed (231-595-7), RCRA code D002.

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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: August 12, 2015



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

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: 314-427-1010

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

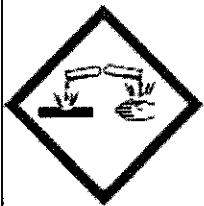
### Classification

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>Danger</b>
<b>Hazard Statements</b> Causes skin irritation Causes serious eye damage	
	
<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		
<u>Property</u>	<u>Values</u>	<u>Remarks</u>	<u>Method</u>
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		
<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

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.

## 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

## 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

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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





## Safety Data Sheet Hydrogen Peroxide 3% USP

SDS Revision Date: 7/16/18

### 1. Identification

#### 1.1. Product identifier

<b>Product Identity</b>	Hydrogen Peroxide 3% USP
<b>Alternate Names</b>	Product Code: 001

#### 1.2. Relevant identified uses of the substance or mixture and uses advised against

<b>Intended use</b>	First aid to help prevent risk of infection in minor cuts, scratches and burns; Aids in the removal of phlegm, mucous or other oral secretions associated with occasional sore mouth.
<b>Application Method</b>	First aid antiseptic: apply a small amount of product on affected area 1 to 3 times daily Oral rinse: mix with an equal amount of water and swish around mouth up to 4 times daily

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

<b>Company Name</b>	Hydrox Laboratories 825 Tollgate Rd. Elgin, IL 60123
---------------------	--

#### Emergency

<b>24 hour Emergency Telephone No.</b>	800-255-3924
<b>Customer Service: Hydrox Laboratories</b>	847-468-9400

### 2. Hazard(s) identification

#### 2.1. Classification of the substance or mixture

Skin Corr. 1B;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.

(Not required on OTC product or case labels per Occupational Safety and Health Standards 29 CFR 1910.1200(b)(5))



**Danger**

H314 Causes severe skin burns and eye damage.



## Safety Data Sheet Hydrogen Peroxide 3% USP

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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. Stay at rest.

P303+361+353 IF ON SKIN (or hair): Remove / 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	Volume %	GHS Classification	Notes
Hydrogen peroxide CAS Number: 0007722-84-1	3.0	Ox. Liq. 1;H271 Acute Tox. 4;H332 Acute Tox. 4;H302 Skin Corr. 1A;H314	[1][2]

[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

Remove to fresh air, keep patient warm and at rest. If breathing is irregular or stopped, give artificial respiration. If unconscious place in the recovery position and obtain immediate medical attention. Give nothing by mouth.

#### Eyes

Irrigate copiously with clean water for at least 15 minutes, holding the eyelids apart and



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### Hydrogen Peroxide 3% USP

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	seek medical attention.
<b>Skin</b>	Remove contaminated clothing. Wash skin thoroughly with soap and water or use a recognized skin cleanser.
<b>Ingestion</b>	If swallowed do NOT induce vomiting and obtain immediate medical attention.
<b>4.2. Most important symptoms and effects, both acute and delayed</b>	
<b>Overview</b>	Inhalation of vapors and mists irritate the nose and throat. Minimally irritating to the eyes and mildly irritating to the skin. See section 2 for further details.
<b>Eyes</b>	Causes serious eye damage.
<b>Skin</b>	Causes severe skin burns and eye damage.

## 5. Fire-fighting measures

### 5.1. Extinguishing media

Recommended extinguishing media; Flood with water spray or water fog.

### 5.2. Special hazards arising from the substance or mixture

Hazardous decomposition: Oxygen, which supports combustion.

Do not breathe mist / vapors / spray.

### 5.3. Advice for fire-fighters

Fire fighters should wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear.

ERG Guide No. ----

## 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

Biodegradable, non-hazardous to environment.

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

Flush with water: wear rubber boots, rubber apron and goggles.

## 7. Handling and storage

### 7.1. Precautions for safe handling

See section 2 for further details. - [Prevention]:

### 7.2. Conditions for safe storage, including any incompatibilities



## Safety Data Sheet

### Hydrogen Peroxide 3% USP

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Handle containers carefully to prevent damage and spillage.

Incompatible materials: Reducing agents, combustible materials.

Store in a cool, dark place. Avoid extreme heat.

See section 2 for further details. - [Storage]:

#### 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
0007722-84-1	Hydrogen peroxide	OSHA	TWA 1 ppm (1.4 mg/m3)
		ACGIH	TWA: 1 ppm
		NIOSH	TWA 1 ppm (1.4 mg/m3)
		Supplier	No Established Limit

CAS No.	Ingredient	Source	Value
0007722-84-1	Hydrogen peroxide	OSHA	Select Carcinogen: No
		NTP	Known: No; Suspected: No
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: Yes; Group 4: No;

### 8.2. Exposure controls

**Respiratory** If workers are exposed to concentrations above the exposure limit they must use the appropriate, certified respirators.

**Eyes** Protective goggles if desired.

**Skin** Rubber or vinyl gloves.

**Engineering Controls** Not applicable

**Other Work Practices** 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]:

## 9. Physical and chemical properties

<b>Appearance</b>	Clear, Colorless Liquid
<b>Odor</b>	Odorless
<b>Odor threshold</b>	Not Measured
<b>pH</b>	Not Available



## Safety Data Sheet

### Hydrogen Peroxide 3% USP

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Melting point / freezing point	Not Available
Initial boiling point and boiling range	212°F
Flash Point	Not Applicable
Evaporation rate (Butyl Acetate = 1)	> 1
Flammability (solid, gas)	Not Applicable
Upper/lower flammability or explosive limits	<b>Lower Explosive Limit:</b> Not Applicable <b>Upper Explosive Limit:</b> Not Applicable
Vapor pressure (Pa)	23 mmHg
Vapor Density	Not Available
Specific Gravity (H <sub>2</sub> O = 1)	1.1
Solubility in Water	Complete
Partition coefficient n-octanol/water (Log Kow)	Not Measured
Auto-ignition temperature	Not Measured
Decomposition temperature	Not Measured
Viscosity (cSt)	Not Measured
Heavy Metals	5 ppm maximum
Limit of Preservative	NMT 50 mg
Hydrogen Peroxide Assay	2.5%-3.5%

#### 9.2. Other information

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

No data available.

#### 10.4. Conditions to avoid

Extreme heat and contamination.

#### 10.5. Incompatible materials

Reducing agents, combustible materials.

#### 10.6. Hazardous decomposition products

Oxygen, which supports combustion.



## Safety Data Sheet Hydrogen Peroxide 3% USP

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### 11. Toxicological information

#### Acute toxicity

Ingredient	Oral LD50, mg/kg	Skin LD50, mg/kg	Inhalation Vapor LD50, mg/L/4hr	Inhalation Dust/Mist LD50, mg/L/4hr	Inhalation Gas LD50, ppm
Hydrogen peroxide - (7722-84-1)	801.00, Rat - Category: 4	2,000.00, Rat - Category: 4	2.00, Rat - Category: 2	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	1B	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

### 12. Ecological information

#### 12.1. Toxicity

No additional information provided for this product. See Section 3 for chemical specific data.

#### Aquatic Ecotoxicity

Ingredient	96 hr LC50 fish, mg/l	48 hr EC50 crustacea, mg/l	ErC50 algae, mg/l
Hydrogen peroxide - (7722-84-1)	22.00, Oncorhynchus mykiss	2.32, Daphnia magna	0.71 (72 hr), Microcystis pulverea ssp. incerta

#### 12.2. Persistence and degradability



## Safety Data Sheet

### Hydrogen Peroxide 3% USP

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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

Not regulated

## 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> No <b>Immediate (Acute):</b> Yes <b>Delayed (Chronic):</b> No

#### EPCRA 311/312 Chemicals and RQs:

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

#### EPCRA 302 Extremely Hazardous:

Hydrogen peroxide

#### EPCRA 313 Toxic Chemicals:

No chemicals at levels which require reporting under this statute.

#### Proposition 65 - Carcinogens (>0.0%):

No chemicals at levels which require reporting under this statute.



## Safety Data Sheet Hydrogen Peroxide 3% USP

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**Proposition 65 - Developmental Toxins (>0.0%):**

No chemicals at levels which require reporting under this statute.

**Proposition 65 - Female Repro Toxins (>0.0%):**

No chemicals at levels which require reporting under this statute.

**Proposition 65 - Male Repro Toxins (>0.0%):**

No chemicals at levels which require reporting under this statute.

**New Jersey RTK Substances (>1%):**

Hydrogen peroxide

**Pennsylvania RTK Substances (>1%):**

Hydrogen peroxide

### 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:

H271 May cause fire or explosion; strong oxidizer.

H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

H332 Harmful if inhaled.

**This is the first version in the GHS SDS format. Listings of changes from previous versions in other formats are not applicable.**

Disclaimer: The contents of this MSDS are believed to be correct but do not purport to be all-inclusive and should only be used as a guide. Hydrox Laboratories, Inc. disclaims any express or implied warranty as to the accuracy of the above information and shall not be held liable for any direct, incidental or consequential damages resulting from the reliance on the above information.

End of Document

Date: January 23, 2015

## SAFETY DATA SHEET

### SECTION 1 - IDENTIFICATION

**Product identifier used on the label:** HYDROGEN PEROXIDE MULTIPURPOSE CLEANER

**Other means of Identification:** ES72

**Recommended use of the chemical and restrictions on use:** For professional use only.

**Manufacturer/Supplier:**

Charlotte Products Ltd.

**Address:**

2060 Fisher Dr.

Peterborough, On K9J 8N4

**Telephone:** 705-740-2880

**Fax:** 705-745-1239

**24 Hr. Emergency Tel. #:** Infotrac 1-800-535-5053 (North America), 011-1-352-323-3500 (International)

### SECTION 2 - HAZARDS IDENTIFICATION

**Classification of the chemical:**

Skin Corrosion/Irritation 2

Eye Damage/Irritation 1

**Label elements:**

**Signal Word:** Danger

**Hazard statement(s)**

H315 Causes skin irritation

H318 Causes serious eye damage

**Precautionary statement(s)**

P264 Wash exposed areas thoroughly after handling

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

P362 Take off contaminated clothing and wash before reuse

P501 Dispose of contents/container in accordance with local regulation

**If swallowed:** Rinse mouth. Do NOT induce vomiting. Immediately call a poison center or doctor/physician.

**If on skin (or hair):** Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation occurs get medical advice/attention. Wash contaminated clothing before reuse.

**If inhaled:** Remove person to fresh air and keep comfortable for breathing. Immediately call a poison center or doctor/physician.

**If in eyes:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a doctor/physician.

Hazard pictogram(s)



Other hazards not otherwise classified: None Known

Unknown Acute Toxicity: 0.6%

### SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name, Common Name & Synonyms:	CAS #	Concentration %
ALCOHOLS, ETHOXYLATED	68991-48-0	3-7
Hydrogen Peroxide (35%)	7722-84-1	7-13

**\*\* If the chemical name/CAS # is "proprietary" and/or the weight % is shown as a range, this information had been withheld as a trade secret.**

### SECTION 4 - FIRST-AID MEASURES

Description of first aid measures:

**If swallowed:** Rinse mouth. Do NOT induce vomiting. Immediately call a poison center or doctor/physician.

**If on skin (or hair):** Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation occurs get medical advice/attention. Wash contaminated clothing before reuse.

**If inhaled:** Remove person to fresh air and keep comfortable for breathing. Immediately call a poison center or doctor/physician.

**If in eyes:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a doctor/physician.

**Most Important symptoms and effects, both acute and delayed:** Causes severe skin irritation and eye damage

**Indication of any immediate medical attention and special treatment needed:** Treat symptomatically

### SECTION 5 - FIRE-FIGHTING MEASURES

Extinguishing media:

**Suitable extinguishing media:** Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable extinguishing media:** Not determined

**Special hazards arising from the substance or mixture:** None known

**Flammability classification:** Not flammable

**Hazardous combustion products:** Carbon oxides, oxides of phosphorus other unidentified organic compounds.

**Special protective equipment and precautions for firefighters:**

**Protective equipment for fire-fighters:** Firelighters should wear proper protective equipment and self-contained breathing apparatus with full face piece operated in positive pressure mode.

**Special fire-fighting procedures:** Move containers from fire area if safe to do so. Cool closed containers exposed to fire with water spray. Do not allow run-off from firefighting to enter drains or water courses. Dike for water control.

## SECTION 6 - ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures:** All persons dealing with the clean-up should wear the appropriate chemically protective equipment. Keep people away from and upwind of spill/leak. Restrict access to area until completion of clean-up. Refer to protective measures listed in sections 7 and 8.

**Methods and material for containment and cleaning up:** Do not allow material to contaminate ground water system. If necessary, dike well ahead of the spill to prevent runoff into drains, sewers, or any natural waterway or drinking supply. Ventilate the area. Prevent further leakage or spillage if safe to do so. Soak up with inert absorbent material. Do not use combustible absorbents, such as sawdust. Pick up and transfer to properly labeled containers. Contaminated absorbent material may pose the same hazards as the spilled product. Contact the proper local authorities.

**Special spill response procedures:** If a spill/release in the US in excess of the EPA reportable quantity is made into the environment, immediately notify the national response center in the United States (phone: 1-800-424-8802).

## SECTION 7 - HANDLING AND STORAGE

**Precautions for safe handling:** Handle in accordance with good industrial hygiene and safety practice. Use protective equipment recommended in section 8. Avoid contact with skin, eyes or clothing. Do not breathe dust/fume/gas/mist/vapors/spray. Wash face, hands, and any exposed skin thoroughly after handling.

**Conditions for safe storage:** Keep container tightly closed and store in a cool, dry and well-ventilated place. Store locked up. Keep out of reach of children.

**Incompatible materials:** Oxidizing agents. Do not mix with other chemicals or cleaners

## SECTION 8 - EXPOSURE CONTROLS AND PERSONAL PROTECTION

Exposure Limits:					
Chemical Name	CAS #	OSHA			
		TLV	W	STEL	PEL
ALCOHOLS, ETHOXYLATED	68991-48-0				
Hydrogen Peroxide (35%)	7722-84-1	1		1	
		ppml		ppm	

**Exposure controls:**

**Ventilation and engineering measures:** Use only in well-ventilated areas. Apply technical measures to comply with the occupational exposure limits. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. In case of insufficient ventilation wear suitable respiratory equipment.

**Respiratory protection:** If airborne concentrations are above the permissible exposure limit or are not known, use NIOSH-approved respirators. Respirators should be selected based on the form and concentration of contaminants in air, and in accordance with OSHA (29 CFR 1910.134). Advice should be sought from respiratory protection specialists.

**Skin protection:** Wear protective gloves. Where extensive exposure to product is possible, use resistant coveralls, apron and boots to prevent contact. The suitability for a specific workplace should be discussed with the producers of the protective regimes.

**Eye face protection:** Wear eye/face protection. Wear as appropriate tightly fitting safety goggles; Safety glasses with side-shields.

**Other protective equipment:** Ensure that eyewash stations and safety showers are close to the workstation location. Other equipment may be required depending on workplace standards.

**General hygiene considerations:** Do not breathe vapours or spray mist. Avoid contact with skin, eyes and clothing. Do not eat, drink or smoke when using this product. Wash exposed areas thoroughly after handling. Remove and wash contaminated clothing before re-use. Handle in accordance with good industrial hygiene and safety practice.

## **SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES**

**Appearance:** Clear Blue Liquid

**Odor:** Pear Fragrance

**Odor threshold:** No applicable information available

**pH:** 4.8

**Melting/Freezing point:** No applicable information available

**Initial boiling point and boiling range:** No applicable information available

**Flash point:** None to boiling

**Flashpoint (Method):** No applicable information available

**Evaporation rate (BuAe = 1):** Similar to water

**Flammability (solid, gas):** Not flammable

**Lower flammable limit (% by vol.):** Not Flammable

**Upper flammable limit (% by vol.):** Not Flammable

**Vapor pressure:** No applicable information available

**Vapor density:** No applicable information available

**Relative density:** 1.02

**Solubility in water:** Soluble

**Other solubility(ies):** No applicable information available

**Partition coefficient:** No applicable information available

**Auto ignition temperature:** No applicable information available

**Decomposition temperature:** No applicable information available

**Viscosity:** Similar to water

**Volatile organic Compounds (%VOC's):** No applicable information available

**Other physical/chemical comments:** No applicable information available

## **SECTION 10 - STABILITY AND REACTIVITY**

**Reactivity:** Not normally reactive

**Chemical stability:** Stable

**Possibility of hazardous reactions:** No hazardous polymerization

**Conditions to avoid:** Keep out of reach of children. Do not use in areas without adequate ventilation. Avoid contact with incompatible materials.

**Incompatible materials:** Fluorine, strong oxidizing or reducing agents, bases, metals, sulfur trioxide, phosphorus pentoxide

**Hazardous decomposition products:** None known. Refer to 'Hazardous Combustion Products' in Section 5

## **SECTION 11 - TOXICOLOGICAL INFORMATION**

### **Information on likely routes of exposure:**

**Routes of entry - inhalation:** Avoid breathing vapors or mists

**Routes of entry - skin & eye:** Avoid contact with skin or eyes

**Routes of entry - Ingestion:** Do not taste or swallow

### **Potential Health Effects:**

**Signs and symptoms of short term (acute) exposure:**

**Symptoms:** Please see section 4 of this SDS sheet for symptoms.

**Potential Chronic Health Effects:**

**Mutagenicity:** Not expected to be mutagenic in humans.

**Carcinogenicity:** No components are listed as carcinogens by ACGIH, IARC, OSHA or NTP.

**Reproductive effects:** No applicable information available

**Sensitization to material:** No applicable information available

**Specific target organ effects:** No data available to indicate product or components will have specific target organ effects.

**Medical conditions aggravated by overexposure:** Preexisting skin or eye disorders.

**Toxicological data:**

See the following table for individual ingredient acute toxicity data.

Chemical name	CAS #	LD <sub>50</sub>	LD <sub>50</sub>	LC <sub>50</sub>
		(Oral, rat)	(Dermal. Rabbit)	(4hr, Inhal., rat)
ALCOHOLS, ETHOXYLATED	68991-48-0	2000		
Hydrogen Peroxide (35%)	7722-84-1	1232	2,001	2,001

\*All empty cells no applicable information available

Other important toxicological hazards: None reported.

**SECTION 12 - ECOLOGICAL INFORMATION**

**Ecotoxicity:** May be dangerous for the environment. No data is available on the product itself. Should not be released into the environment.

**Persistence and degradability:** No applicable information available

**Bioaccumulation potential:** No applicable information available.

**Mobility in soil:** No applicable information available.

**Other Adverse Environmental effects:** No applicable information available.

**SECTION 13 - DISPOSAL CONSIDERATIONS**

**Handling for disposal:** Handle in accordance with good industrial hygiene and safety practice. Refer to protective measures listed in sections 7 and 8. Empty containers retain residue (liquid and/or vapour) and can be dangerous.

**Methods of disposal:** Dispose in accordance with all applicable federal, state, provincial and local regulations. Contact your local, state, provincial or federal environmental agency for specific rules.

**RCRA:** If this product, as supplied, becomes a waste in the United States, it may meet the criteria of a hazardous waste UN defined under RCRA, Title 40 CFR 261. It is the responsibility of the waste generator to determine the proper waste identification and disposal method. For disposal of unused or waste material, check with local, state and federal environmental agencies.

**SECTION 14 - TRANSPORTATION INFORMATION**

**Special Shipping Information:** Keep from freezing.

**T.D.G. Classification:** Not regulated under T.D.G.

**D.O.T. Classification:** Not regulated under D.O.T.

**SECTION 15 - REGULATORY INFORMATION****Occupational Health and Safety Regulations:**

WHMIS 1988 Class: D2B.

OSHA & WHMIS: SDS prepared pursuant to the Hazard Communication Standard (CFR29 1910.1200) and Canadian WHMIS 2015 regulations (Controlled Products Regulations under the Hazardous Product Act).

**Environmental Regulatory Lists:**

SARA – Section 313 (Toxic Chemical Release Reporting) 40 CFR 372 – None of these ingredients are listed.

RCRA – Section 102 (Reportable Quantity) 40 CFR 302 – None of these ingredients are listed.

RCRA 40CFR 261 (SUBPART D) – None of these ingredients are listed.

CLEAN WATER ACT – Section 311 (Reportable Quantity) 40 CFR 116 – None of these ingredients are listed.

CLEAN AIR ACT – Section 312 (List of Hazardous Air Pollutants) 40 CFR 63 (Subpart C) – None of these ingredients are listed.  
National Pollutant Release Inventory – None of the ingredients are listed.  
Toxic Substances Control Act (TSCA) – All the ingredients are registered on the Chemical Substance Inventory.  
Canadian Domestic Substance List (DSL) – All the ingredients are registered on the DSL.

## **SECTION 16 - OTHER INFORMATION**

### **Legend:**

ACGIH: American Conference of Governmental Industrial Hygienists  
CAS: Chemical Abstract Services  
CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act of 1980  
CFR: Code of Federal Regulations  
CSA: Canadian Standards Association  
DOT: Department of Transportation  
ECOTOX: U.S. EPA Ecotoxicology Database  
EINECS: European Inventory of Existing Commercial chemical Substances  
EPA: Environmental Protection Agency  
HSDB: Hazardous Substances Data Bank  
IARC: International Agency for Research on Cancer  
IUCILID: International Uniform Chemical Information Database  
LC: Lethal Concentration  
LD: Lethal Dose  
NIOSH: National Institute of Occupational Safety and Health  
NTP: National Toxicology Program  
OECD: Organization for Economic Co operation and Development  
OSHA: Occupational Safety and Health Administration  
PEL: Permissible exposure limit  
RCRA: Resource Conservation and Recovery Act  
RTECS: Registry of Toxic Effects of Chemical Substances  
SARA: Superfund Amendments and Reauthorization Act  
SDS: Safety Data Sheet Material Safety Data Sheet  
STEL: Short Term Exposure Limit  
TOG: Canadian Transportation of Dangerous Goods Act & Regulations  
TLV: Threshold Limit Values  
TWA: Time Weighted Average  
WHMIS: Workplace Hazardous Materials Identification System

**Prepared By:** Charlotte Technical Services Group

**Tel:** (705) 740 2880

### **DISCLAIMER**

Information for this material safety data sheet 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 this supplier, it is assumed that users of this material have been fully trained accordingly to the mandatory requirements of GHS. 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 within this form.

**END OF DOCUMENT**

**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>	HYDROGEN PEROXIDE, 3%
<b>Synonyms</b>	Hydrogen peroxide aqueous solution, stabilized

**Section 2 Hazards Identification**

**Signal word:** WARNING

**Pictograms:** No symbol required

**Target organs:** Respiratory and gastrointestinal systems, skin, eyes

**GHS Classification:**

Acute toxicity (Category 5)

Eye irritation (Category 2B)

**GHS Label information: Hazard statement:**

H303: May be harmful if swallowed.

H320: Causes eye irritation.

**Precautionary statement:**

P264: Wash hands thoroughly after handling.

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.

P312: Call a POISON CENTER or doctor 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
Water	7732-18-5	<94%	231-791-2
Hydrogen peroxide	7722-84-1	6%	231-765-0
Acetanilide	103-84-4	0.05%	203-150-7

**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 IRRITATION TO EYES. 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:** Water only! Apply vast amounts for cooling and dilution.

**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. This product is a strong oxidizer which may release oxygen and promote the combustion of flammable materials. Spontaneous combustion can occur if allowed to remain in contact with oxidizable materials. Drying of product on clothing or combustible material may cause fire.

**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. 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**

**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)
	Hydrogen peroxide	TWA: 1 ppm ; 1.4 mg/m <sup>3</sup> (A3)	TWA: 1 ppm ; 1.4 mg/m <sup>3</sup>	TWA: 1 ppm ; 1.4 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> Clear, colorless liquid.	<b>Evaporation rate ( Water = 1):</b> <1	<b>Partition coefficient:</b> Data not available
<b>Odor:</b> Slightly pungent 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> 14 (water)	<b>Viscosity:</b> Data not available.
<b>Melting / Freezing point:</b> Approximately 0°C (32°F) (water)	<b>Vapor density (Air = 1):</b> 0.7 (water)	<b>Molecular formula:</b> Mixture
<b>Boiling point:</b> Approximately 100°C (212°F) (water)	<b>Relative density (Specific gravity):</b> Approximately 1.0 (water)	<b>Molecular weight:</b> Mixture
<b>Flash point:</b> Data not available	<b>Solubility(ies):</b> Complete in 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. Contact with combustible materials may result in spontaneous combustion.

**Incompatible materials:** Acids, bases, metals, metal salts, reducing agents, organic materials, alkalies, dust and dirt contaminants, flammable substances, oxidizable materials.

**Hazardous decomposition products:** Oxygen, which will promote the combustion of flammable material.

**Section 11 Toxicological Information**

**Acute toxicity:** Oral-rat LD50: 800 mg/kg [50% hydrogen peroxide]

**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.

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.

Ingestion: May be harmful if swallowed.

Skin: May cause irritation.

Eyes: May cause 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 #: MX0900000 [Hydrogen peroxide]

**Section 12 Ecological Information**

**Toxicity to fish:** *Gambusia affinis* (fish, fresh water), NOEC = 2.38 - 9.86 mg/l [Hydrogen peroxide]

**Toxicity to daphnia and other aquatic invertebrates:** *Daphnia magna* (Crustacea), EC50 = 7.7 mg/l/24 hours [Hydrogen peroxide]

**Toxicity to algae:** *Chlorella vulgaris* (Algae), EC50 = 2.5 mg/l/growth rate [Hydrogen peroxide]

**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
Hydrogen peroxide	Listed	Not listed	Not listed	Listed	Not 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.

**Revision Date:** September 5, 2013

**Supersedes:** February 23, 2011

**Section 1 Chemical Product and Company Information**

5100 West Henrietta Rd  
PO Box 92912  
Rochester, NY 14692-9012  
Tel: 1800-962-2660

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

**Product** HYDROGEN PEROXIDE, 30%, STABILIZED

**Synonyms** Hydrogen Dioxide

**Section 2 Hazards Identification**

**Signal word:** DANGER

**Pictograms:** GHS03 / GHS05 / GHS07

**Target organs:** Respiratory and gastrointestinal systems, skin, eyes

**GHS Classification:**

Oxidizing liquid (Category 2)

Acute toxicity (Category 4)

Skin irritation (Category 2)

Eye damage (Category 1)

STOT-SE (Category 3)

**GHS Label Information: Hazard statement:**

H272: May intensify fire; oxidizer.

H302: Harmful if swallowed.

H315: Causes skin irritation.

H318: Causes serious eye damage.

H335: May cause respiratory 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/acids/oxidizers.

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

P261: Avoid breathing 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.

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.

P332+P313: If skin irritation occurs: 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.

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

P312: Call a POISON CENTER or doctor if you feel unwell.

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

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.

**Supplementary information:**

Do not tamper with venting mechanism.

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	<70%	231-791-2
Hydrogen peroxide	7722-84-1	30%	231-765-0
Acetanilide	103-84-4	0.05%	203-150-7

**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 IRRITATION AND / OR BURNS TO EYES. 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 IRRITATION AND / OR BURNS TO THE SKIN. Remove contaminated clothing. Flush thoroughly with mild soap and water. If irritation occurs, get medical attention.

**Section 5 Fire Fighting Measures**

**Suitable Extinguishing Media:** Water only! Apply vast amounts for cooling and dilution.

**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. This product is a strong oxidizer which may release oxygen and promote the combustion of flammable materials. Spontaneous combustion can occur if allowed to remain in contact with oxidizable materials. Drying of product on clothing or combustible material may cause fire.

**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. 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

**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. Keep away from ignition sources. Do not allow temperature of storage to rise above 100°F.

## Section 8 Exposure Controls / Personal Protection

Exposure Limits:	Chemical Name	ACGIH (TLV)	OSHA (PEL)	NIOSH (REL)
	Hydrogen peroxide	TWA: 1 ppm ; 1.4 mg/m <sup>3</sup> (A3)	TWA: 1 ppm ; 1.4 mg/m <sup>3</sup>	TWA: 1 ppm ; 1.4 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

**Appearance:** Clear, colorless liquid.

**Odor:** Pungent odor.

**Odor threshold:** Data not available.

**pH:** 0-3

**Melting / Freezing point:** -26 to -52°C (-18 to -62°F)

**Boiling point:** 104-113°C (220-237°F)

**Flash point:** Not applicable

**Evaporation rate (Butyl acetate = 1):** >1

**Flammability (solid/gas):** Data not available.

**Explosion limits: Lower / Upper:** Data not available

**Vapor pressure (mm Hg):** 18-27 @ 30°C (86°F)

**Vapor density (Air = 1):** 0.8 - 1.0 (calculated)

**Relative density (Specific gravity):** 1.1 - 1.2

**Solubility(ies):** Complete in water.

**Partition coefficient:** Data not available

**Auto-ignition temperature:** Data not available

**Decomposition temperature:** Data not available.

**Viscosity:** Data not available.

**Molecular formula:** Mixture

**Molecular weight:** Mixture

## 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. Contact with combustible materials may result in spontaneous combustion.

**Incompatible materials:** Acids, bases, metals, metal salts, reducing agents, organic materials, alkalies, dust and dirt contaminants, flammable substances, oxidizable materials.

**Hazardous decomposition products:** Oxygen, which will promote the combustion of flammable material.

## Section 11 Toxicological Information

**Acute toxicity:** Oral-rat LD50: 800 mg/kg [50% hydrogen peroxide]

**Skin corrosion/irritation:** Skin-rabbit - Slight irritant.

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

**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.

**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 narcotic effects.

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

**Aspiration hazard:** Data not available

**Potential health effects:**

**Inhalation:** Expected to be irritating to respiratory tract.

**Ingestion:** Expected to cause burns to the gastrointestinal tract.

**Skin:** Expected to cause irritation and/or burns. As the concentration or time of exposure increases, the extent of damage increases.

**Eyes:** Expected to cause irritation and/or burns. Could cause corneal damage which may occur several days later.

**Signs and symptoms of exposure:** See Potential health effects above. Medical conditions which may be aggravated by exposure include conjunctivitis of the eye, dermatitis of the skin, asthma and respiratory diseases.

**Additional information:** RTECS #: MX0900000 [Hydrogen peroxide]

## Section 12 Ecological Information

**Toxicity to fish:** *Gambusia affinis* (fish, fresh water), NOEC = 2.38 - 9.86 mg/l [Hydrogen peroxide]

**Toxicity to daphnia and other aquatic invertebrates:** *Daphnia magna* (Crustacea), EC50 = 7.7 mg/l/24 hours [Hydrogen peroxide]

**Toxicity to algae:** *Chlorella vulgaris* (Algae), EC50 = 2.5 mg/l/growth rate [Hydrogen peroxide]

**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 Transportation Information (US DOT / CANADA TDG)

**UN/NA number:** UN2014

**Shipping name:** Hydrogen peroxide, aqueous solutions

**Hazard class:** 5.1, (8)

**Packing group:** II

**Reportable Quantity:** No

**Marine pollutant:** No

**Exceptions:** No exceptions

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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
Hydrogen peroxide, 30%	Listed	Not listed	Not listed	Listed	Not listed	C ; D2B ; 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: February 27, 2013

Supersedes: November 23, 2011

2/01/91

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## MATERIAL SAFETY DATA SHEET

0000035

## Manufacturer:

Address 1....: NORTHEAST JANITORIAL SUPPLY, INC.

Toll Free Number: 1-800/752-7869

Address 2....: INDUSTRIAL DISTRIBUTORS

Revision Date: 1/17/90

City/State/Zip...: POST OFFICE BOX 455

Location...: N/A

Other Locat...: POMPTON LAKES, NEW JERSEY 07442

Contact/Prep...: (201) 835-9515

Trade Name/Synonyms....: HYNOTE LEMON ODOR FURNITURE POLISH

Chemical Name/Synonyms: N/A

Formula.....: N/A

DO NOT MASK OR ALTER THE 5 DIGIT PRODUCT CODE SHOWN &lt;-&lt;-&lt;-&lt;-&lt;-

Product Code.....: 84408

D.O.T. Description....: CLEANING COMPOUNDS NOI/CONSUMER COMMODITY ORM-D

## \*\*\*\*\* HAZARDOUS INGREDIENTS \*\*\*\*\*

Does product contain hazardous ingredients?

Chemical/Common Name	CAS-Number	%	PEL-OSHA	TLV-AACIH
C8-C9 ISOPARAFFIN	64742-48-2	10-20	N/A	N/A
PROPANE	74-98-6	5-10	1000 PPM	N/A
BUTANE	106-97-8	5-10	800 PPM	800 PPM

Does product contain carcinogens? (NTP IARC OSHA)

NO

## \*\*\*\*\* HEALTH HAZARD DATA \*\*\*\*\*

Health Effects (Acute and Chronic)

EYES- MAY IRRITATE EYES.

Primary routes of entry

N/A

Medical conditions aggravated by exposure

UNKNOWN

Emergency first aid procedures

QUICKLY FOLLOW DIRECTIONS BELOW; CALL A POISON CONTROL CENTER OR PHYSICIAN.  
GET QUICK MEDICAL ATTENTION IF ANY ILL EFFECTS CONTINUE OR DEVELOP LATER.  
EYES- FLUSH EYES WITH PLENTY OF WATER WHILE REMOVING ANY CONTACT LENSES,  
THEN HOLD EYELIDS OPEN AND CONTINUE FLUSHING FOR 15 MINUTES.

## \*\*\*\*\* CHEMICAL DATA \*\*\*\* (On Concentrate) \*\*\*\*\*

Boiling Point(F)....	212	Specific Gravity(Water=1).....	0.94
Vapor Pressure(1MMHG)	18	Melting Point (F).....	N/A
Vapor Density(air=1)	41	Evap Rate( B. ACETATE =1)	<1
Solubility in Water..	NEGLIGIBLE		

Appearance and Odor Information  
VISCIOUS, OPAQUE, WHITE LIQUID PLEASANTLY SCENTED.

## \*\*\*\*\* PHYSICAL HAZARD DATA \*\*\*\*\*

Flash Point (On Conc.) 47 F (TCC) Flammable Limits-LEL= 1 UEL= 7  
Extinguishing Media  
FOAM, DRY CHEMICAL, OR CO2.  
Special Fire Fighting Procedures  
KEEP CONTAINERS COOL. USE SHIELDING TO PROTECT PERSONNEL AGAINST BURSTING,  
RUPTURING OR VENTING CONTAINERS.  
Unusual Fire and Explosion Hazards  
AT ELEVATED TEMPERATURES (OVER 120 F) CONTAINERS MAY VENT, RUPTURE OR BURST.

## \*\*\*\*\* REACTIVITY DATA \*\*\*\*\*

Incompatibility (Materials to Avoid)

NONE

Hazardous Decomposition Products

OXIDES OF CARBON MAY BE FORMED UPON COMBUSTION.

Will hazardous polymerization occur?

NO

Conditions to avoid/polymerization

NONE

Is the product stable?

YES

Conditions to avoid/stability

AVOID HEATING TO ABNORMAL TEMPERATURES.

\*\*\*\*\* SPILL AND LEAK PROCEDURES \*\*\*\*\*

Steps to be taken in case material is released or spilled  
REMOVE SOURCES OF FLAME, SPARK OR HEAT. PROVIDE ADEQUATE VENTILATION. Wipe  
UP SPILLS, THEN WASH WITH A CLEANER TO REMOVE FINAL TRACES. FLOORS MAY BE  
SLIPPERY; USE CAUTION TO AVOID FALLS.

Waste Disposal Method

REPLACE CAP AND DISCARD CONTAINER IN TRASH. DO NOT PUNCTURE OR INCINERATE.

\*\*\*\*\* EXPOSURE CONTROL INFORMATION \*\*\*\*\*

Ventilation		
Local Exhaust	NONE REQUIRED	Mechanical (GEN) ADEQUATE VENTILATION
Special.....	N/A	Other..... N/A

Respiratory Protection

NONE REQUIRED

Protective Gloves

NONE REQUIRED

Other Protective Equipment

SAFETY GLASSES

Other Engineering Controls

N/A

Work Practices

ALWAYS FOLLOW SAFE WORK PRACTICES.

Hygienic Practices

N/A

\*\*\*\*\* SPECIAL PRECAUTIONS \*\*\*\*\*

Precautions to be taken in handling and storage

CAUTION. MAY IRRITATE EYES. CONTENTS UNDER PRESSURE. KEEP OUT OF REACH OF  
CHILDREN. STORE IN A COOL, DRY AREA. DO NOT STORE WHERE TEMPERATURES MAY  
EXCEED 120 F. AVOID CONTACT WITH EYES. AVOID BREATHING SPRAY MIST OR VAPOR.

Maintenance Precautions

N/A

Other Precautions

READ ENTIRE LABEL BEFORE USING.

Other Comments

DETECTABLE AMOUNTS OF "CHEMICALS KNOWN TO THE STATE OF CALIFORNIA TO CAUSE  
CANCER, BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM" MAY BE FOUND IN VARIOUS  
PRODUCTS AND THEIR VAPORS OR RESULT FROM THEIR USE. READ AND FOLLOW LABEL  
DIRECTIONS AND OTHER PRODUCT SAFETY AND HEALTH INFORMATION WHICH YOU HAVE  
BEEN PROVIDED WITH WHEN HANDLING OR USING OUR PRODUCTS.