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FLINN SCIENTIFIC, INC.

Safety Data Sheet (SDS)

SDS #: 5.10

Revision Date: March 21, 2014

SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Acetic Acid Solution, 1.7 M - 4.2 M

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

CHEMTREC Emergency Phone Number: (800) 424-9300

Signal Word **WARNING**

Pictograms



SECTION 2 — HAZARDS IDENTIFICATION

Hazard class: Skin and serious eye damage, corrosion or irritation (Category 2, 2B). Causes skin and eye irritation (H315+H320).

SECTION 3 — COMPOSITION, INFORMATION ON INGREDIENTS

Component Name	CAS Number	Formula	Formula Weight	Concentration
Acetic acid	64-19-7	CH ₃ COOH	60.05	10 - 24%
Water	7732-18-5	H ₂ O	18.00	76 - 90%

SECTION 4 — FIRST AID MEASURES

Call a POISON CENTER or physician if you feel unwell.

If inhaled: Remove victim to fresh air and keep at rest in a position comfortable for breathing.**If in eyes:** Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do so. Continue rinsing (P305+P351+P338). **If eye irritation persists:** Get medical advice or attention (P337+P313).**If on skin:** Wash with plenty of water (P302+P352). **If skin irritation occurs:** Get medical advice or attention (P332+P313).**If swallowed:** Rinse mouth. Call a POISON CENTER or physician if you feel unwell.

SECTION 5 — FIRE FIGHTING MEASURES

Nonflammable, noncombustible solution.

In case of fire: Use a tri-class dry chemical fire extinguisher.NFPA CODE
None
established

SECTION 6 — ACCIDENTAL RELEASE MEASURES

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

SECTION 7 — HANDLING AND STORAGE

Flinn Suggested Chemical Storage Pattern: Organic #1. Store with acids, anhydrides and peracids.

SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION

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

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

Clear, colorless liquid. Slight vinegar-like odor.
Soluble: Water

pH ~2.1 - 2.3

SECTION 10 — STABILITY AND REACTIVITY

Avoid contact with strong oxidizers, especially chromic and nitric acids.
Shelf life: Indefinite, if stored properly.

SECTION 11 — TOXICOLOGICAL INFORMATION

Acute effects: N.A.	ORL-RAT LD ₅₀ : 3310 mg/kg as acetic acid
Chronic effects: Prolonged inhalation of vapors can cause irritation of the respiratory tract.	IHL-MUS LC ₅₀ : 5620 ppm/1H as acetic acid
Target organs: N.A.	SKN-RBT LD ₅₀ : 1.06 mg/kg as acetic acid

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

SECTION 12 — ECOLOGICAL INFORMATION

Data not yet available.

SECTION 13 — DISPOSAL CONSIDERATIONS

Please review all federal, state and local regulations that may apply before proceeding.
Flinn Suggested Disposal Method #24a is one option.

SECTION 14 — TRANSPORT INFORMATION

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

N/A = Not applicable

SECTION 15 — REGULATORY INFORMATION

Not listed.

SECTION 16 — OTHER INFORMATION

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Consult your copy of the *Flinn Science Catalog/Reference Manual* for additional information about laboratory chemicals.
Revision Date: March 21, 2014

SAFETY DATA SHEET

B65V600

Section 1. Identification

Product name : ACROLON™ 218 HS Polyurethane (Part B)
Hardener
Product code : B65V600
Other means of identification : Not available.
CAS # : Not applicable.
Product type : Liquid.
Relevant identified uses of the substance or mixture and uses advised against

Not applicable.

Manufacturer : THE SHERWIN-WILLIAMS COMPANY
101 W. Prospect Avenue
Cleveland, OH 44115

Emergency telephone number of the company : (216) 566-2917
Product Information Telephone Number : (800) 524-5979
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 : ACUTE TOXICITY (inhalation) - Category 3
SKIN CORROSION/IRRITATION - Category 2
SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A
RESPIRATORY SENSITIZATION - Category 1
SKIN SENSITIZATION - Category 1

GHS label elements

Hazard pictograms :



Signal word : Danger

Hazard statements : Toxic if inhaled.
Causes serious eye irritation.
Causes skin irritation.
May cause allergy or asthma symptoms or breathing difficulties if inhaled.
May cause an allergic skin reaction.

Precautionary statements

Prevention : Wear protective gloves. Wear eye or face protection. Wear respiratory protection. Use only outdoors or in a well-ventilated area. Avoid breathing vapor. Wash hands thoroughly after handling. Contaminated work clothing must not be allowed out of the workplace.

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Section 2. Hazards identification

- Response** : IF INHALED: If breathing is difficult, remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or physician. If experiencing respiratory symptoms: Call a POISON CENTER or physician. IF ON SKIN: Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation or rash 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.
- Disposal** : Dispose of contents and container in accordance with all local, regional, national and international regulations.
- Supplemental label elements** FOR INDUSTRIAL USE ONLY. This product must be mixed with other components before use. Before opening the packages, READ AND FOLLOW WARNING LABELS ON ALL COMPONENTS. VAPOR AND SPRAY MIST HARMFUL. Gives off harmful vapor of solvents and isocyanates. DO NOT USE IF YOU HAVE CHRONIC (LONG-TERM) LUNG OR BREATHING PROBLEMS, OR IF YOU HAVE EVER HAD A REACTION TO ISOCYANATES. USE ONLY WITH ADEQUATE VENTILATION. WHERE OVERSPRAY IS PRESENT, A POSITIVE PRESSURE AIR SUPPLIED RESPIRATOR (NIOSH approved) SHOULD BE WORN TO PREVENT EXPOSURE. IF UNAVAILABLE, AN APPROPRIATE PROPERLY FITTED APPROVED NIOSH VAPOR/PARTICULATE RESPIRATOR MAY BE EFFECTIVE. Follow directions for respirator use. Wear the respirator for the whole time of spraying and until all vapors and mists are gone. If you have any breathing problems during use, LEAVE THE AREA and get fresh air. If problems remain or happen later, IMMEDIATELY call a doctor - If not available get emergency medical treatment. Have this label with you. Reacts with water in closed container to produce pressure which may cause container to burst. Please refer to the SDS for additional information. Keep out of reach of children. Do not transfer contents to other containers for storage.
- 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
Hexamethylene Diisocyanate Polymer	99	28182-81-2
Hexamethylene Diisocyanate (max.)	1	822-06-0

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

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.

Section 4. First aid measures

- 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. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours. In the event of any complaints or symptoms, avoid further exposure.
- Skin contact** : Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : 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. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. 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** : Toxic if inhaled. May cause allergy or asthma symptoms or breathing difficulties if inhaled.
- Skin contact** : Causes skin irritation. May cause an allergic skin reaction.
- Ingestion** : No known significant effects or critical hazards.

Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following:
pain or irritation
watering
redness
- Inhalation** : Adverse symptoms may include the following:
wheezing and breathing difficulties
asthma
- Skin contact** : Adverse symptoms may include the following:
irritation
redness
- Ingestion** : No specific data.

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

- Notes to physician** : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
- 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. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

Section 4. First aid measures

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** : In a fire or if heated, a pressure increase will occur and the container may burst.
- Hazardous thermal decomposition products** : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
nitrogen oxides
- 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.
- 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. Do not touch or walk through spilled material. Do not breathe 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).

Methods and materials for containment and cleaning up

- Small spill** : Stop leak if without risk. Move containers from spill area. 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. 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). Persons with a history of skin sensitization problems or asthma, allergies or chronic or recurrent respiratory disease should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

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.

Conditions for safe storage, including any incompatibilities : Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits (OSHA United States)

Ingredient name	Exposure limits
Hexamethylene Diisocyanate Polymer Hexamethylene Diisocyanate (max.)	None. ACGIH TLV (United States, 3/2015). TWA: 0.005 ppm 8 hours. TWA: 0.03 mg/m ³ 8 hours. NIOSH REL (United States, 10/2013). TWA: 0.005 ppm 10 hours. TWA: 0.035 mg/m ³ 10 hours. CEIL: 0.02 ppm 10 minutes. CEIL: 0.14 mg/m ³ 10 minutes. OSHA PEL (United States, 2/2013). Absorbed through skin. TWA: 5 mg/m ³ , (as CN) 8 hours.

Occupational exposure limits (Canada)

Ingredient name	Exposure limits
Hexamethylene Diisocyanate (max.)	CA Alberta Provincial (Canada, 4/2009). 8 hrs OEL: 0.005 ppm 8 hours. 8 hrs OEL: 0.03 mg/m ³ 8 hours. CA British Columbia Provincial (Canada, 5/2015). Skin sensitizer. TWA: 0.005 ppm 8 hours. C: 0.01 ppm CA Quebec Provincial (Canada, 1/2014). Skin sensitizer. TWA _{EV} : 0.005 ppm 8 hours. TWA _{EV} : 0.034 mg/m ³ 8 hours. CA Ontario Provincial (Canada, 7/2015). TWA: 0.03 mg/m ³ 8 hours. TWA: 0.01 ppm 8 hours.

Section 8. Exposure controls/personal protection

CA Saskatchewan Provincial (Canada, 7/2013).

STEL: 0.015 ppm 15 minutes.

TWA: 0.005 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.
- 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. Contaminated work clothing should not be allowed out of the workplace. 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**
- Hand protection** : 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.
- Body protection** : 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.
- Other skin protection** : 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.
- Respiratory protection** : 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

- Physical state** : Liquid.
- Color** : Not available.
- Odor** : Not available.
- Odor threshold** : Not available.
- pH** : Not available.
- Melting point** : Not available.
- Boiling point** : Not available.
- Flash point** : Closed cup: 94°C (201.2°F) [Pensky-Martens Closed Cup]
- Evaporation rate** : Not available.

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6/11

Section 9. Physical and chemical properties

Flammability (solid, gas)	: Not available.
Lower and upper explosive (flammable) limits	: Not available.
Vapor pressure	: Not available.
Vapor density	: Not available.
Relative density	: 1.13
Solubility	: Not available.
Partition coefficient: n-octanol/water	: Not available.
Auto-ignition temperature	: Not available.
Decomposition temperature	: Not available.
Viscosity	: Kinematic (room temperature): >0.07 cm ² /s (>7 cSt) Kinematic (40°C (104°F)): >0.205 cm ² /s (>20.5 cSt)
Molecular weight	: Not applicable.
<u>Aerosol product</u>	
Heat of combustion	: 0.437 kJ/g

Section 10. Stability and reactivity

Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	: The product is stable.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: No specific data.
Incompatible materials	: No specific data.
Hazardous decomposition products	: 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
Hexamethylene Diisocyanate Polymer	LC50 Inhalation Vapor	Rat	18500 mg/m ³	1 hours
Hexamethylene Diisocyanate (max.)	LC50 Inhalation Dusts and mists	Rat	124 mg/m ³	4 hours

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Hexamethylene Diisocyanate Polymer	Eyes - Moderate irritant	Rabbit	-	100 milligrams	-
	Skin - Moderate irritant	Rabbit	-	500 milligrams	-

Sensitization

Not available.

Section 11. Toxicological information

Mutagenicity

Not available.

Carcinogenicity

Not available.

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
Hexamethylene Diisocyanate (max.)	Category 3	Not applicable.	Respiratory tract irritation

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on the likely routes of exposure : Not available.

Potential acute health effects

Eye contact : Causes serious eye irritation.
Inhalation : Toxic if inhaled. May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Skin contact : Causes skin irritation. May cause an allergic skin reaction.
Ingestion : No known significant effects or critical hazards.

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:
wheezing and breathing difficulties
asthma
Skin contact : Adverse symptoms may include the following:
irritation
redness
Ingestion : No specific data.

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 : Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.

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 : No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Route	ATE value
Inhalation (vapors)	9.343 mg/l
Inhalation (dusts and mists)	12.4 mg/l

Section 12. Ecological information

Toxicity

Not available.

Persistence and degradability

Not available.

Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
Hexamethylene Diisocyanate (max.)	-	57.63	low

Mobility in soil

Soil/water partition coefficient (K_{oc}) : 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. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains

Section 13. Disposal considerations

and sewers.

Section 14. Transport information

	DOT Classification	TDG Classification	Mexico Classification	IATA	IMDG
UN number	Not regulated.	Not regulated.	Not regulated.	Not regulated.	Not regulated.
UN proper shipping name	-	-	-	-	-
Transport hazard class(es)	-	-	-	-	-
Packing group	-	-	-	-	-
Environmental hazards	No.	No.	No.	No.	No.
Additional information	-	-	-	-	-

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

Not applicable.

Section 16. Other information

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

Health	*	3
Flammability		1
Physical hazards		2

The customer is responsible for determining the PPE code for this material.

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 are not required on SDSs 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 mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

Procedure used to derive the classification

Classification	Justification
ACUTE TOXICITY (inhalation) - Category 3	Calculation method
SKIN CORROSION/IRRITATION - Category 2	Calculation method
SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A	Calculation method
RESPIRATORY SENSITIZATION - Category 1	Calculation method
SKIN SENSITIZATION - Category 1	Calculation method

History

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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.

SAFETY DATA SHEET

B65B600

Section 1. Identification

Product name : ACROLON™ 218 HS Polyurethane - Gloss (Part A)
Black
Product code : B65B600
Other means of identification : Not available.
Product type : Liquid.
Relevant identified uses of the substance or mixture and uses advised against
Not applicable.

Manufacturer : THE SHERWIN-WILLIAMS COMPANY
101 PROSPECT AVENUE, NW
CLEVELAND, OHIO 44115

Emergency telephone number of the company : (216) 566-2917

Product Information Telephone Number : (800) 524-5979

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 LIQUIDS - Category 2
SKIN CORROSION/IRRITATION - Category 2
SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A
CARCINOGENICITY - Category 1A
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1
Percentage of the mixture consisting of ingredient(s) of unknown toxicity: 34.7%

GHS label elements

Hazard pictograms :



Signal word : Danger

Hazard statements : Highly flammable liquid and vapor.
Causes serious eye irritation.
Causes skin irritation.
May cause cancer.
Causes damage to organs through prolonged or repeated exposure.

Precautionary statements

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Section 2. Hazards identification

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. Use explosion-proof electrical, ventilating, lighting and all material-handling equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Keep container tightly closed. Do not breathe vapor. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling.
Response	: Get medical attention if you feel unwell. IF exposed or concerned: Get medical attention. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. 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. Store in a well-ventilated place. Keep cool.
Disposal	Dispose of contents and container in accordance with all local, regional, national and international regulations.
Supplemental label elements	<p>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. This product must be mixed with other components before use. Before opening the packages, READ AND FOLLOW WARNING LABELS ON ALL COMPONENTS. Adequate ventilation required when sanding or abrading the dried film. If Adequate ventilation cannot be provided wear an approved particulate respirator (NIOSH approved). Follow respirator manufacturer's directions for respirator use. DELAYED EFFECTS FROM LONG TERM OVEREXPOSURE. Abrading or sanding of the dry film may release Crystalline Silica which has been shown to cause lung damage and cancer under long term exposure.</p> <p>Please refer to the SDS for additional information. Do not transfer contents to other containers for storage.</p>
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
crystalline silica, respirable powder	≥25 - ≤50	14808-60-7
n-Butyl Acetate	≤10	123-86-4
Methyl Ethyl Ketone	≤5	78-93-3
Xylene	≤5	1330-20-7
Medium Aromatic Hydrocarbons	≤3	64742-94-5
Carbon Black	≤3	1333-86-4
Ethylbenzene	<1	100-41-4
Naphthalene	≤0.3	91-20-3

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

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 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 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. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : 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. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. 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** : No known significant effects or critical hazards.
- Skin contact** : Causes skin irritation.
- Ingestion** : No known significant effects or critical hazards.

Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following:
pain or irritation
watering
redness
- Inhalation** : No specific data.
- Skin contact** : Adverse symptoms may include the following:
irritation
redness
- Ingestion** : No specific data.

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. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media : Use dry chemical, CO₂, water spray (fog) or foam.

Unsuitable extinguishing media : Do not use water jet.

Specific hazards arising from the chemical : Highly flammable liquid and vapor. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. The vapor/gas is heavier than air and will spread along the ground. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Runoff to sewer may create fire or explosion hazard.

Hazardous thermal decomposition products : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
metal oxide/oxides

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. 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).

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). Avoid exposure - obtain special instructions before use. 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 ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. 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. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.

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.

Conditions for safe storage, including any incompatibilities : Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
crystalline silica, respirable powder	<p>OSHA PEL Z3 (United States, 2/2013). TWA: 250 MPPCF / (%SiO₂+5) 8 hours. Form: Respirable TWA: 10 MG/M³ / (%SiO₂+2) 8 hours. Form: Respirable</p> <p>ACGIH TLV (United States, 3/2015). TWA: 0.025 mg/m³ 8 hours. Form: Respirable fraction</p> <p>NIOSH REL (United States, 10/2013). TWA: 0.05 mg/m³ 10 hours. Form: respirable dust</p>
n-Butyl Acetate	<p>ACGIH TLV (United States, 3/2015). TWA: 150 ppm 8 hours. STEL: 200 ppm 15 minutes.</p> <p>NIOSH REL (United States, 10/2013). TWA: 150 ppm 10 hours. TWA: 710 mg/m³ 10 hours. STEL: 200 ppm 15 minutes. STEL: 950 mg/m³ 15 minutes.</p> <p>OSHA PEL (United States, 2/2013). TWA: 150 ppm 8 hours. TWA: 710 mg/m³ 8 hours.</p>
Methyl Ethyl Ketone	<p>ACGIH TLV (United States, 3/2015). TWA: 200 ppm 8 hours. TWA: 590 mg/m³ 8 hours.</p>

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Section 8. Exposure controls/personal protection

Xylene	STEL: 300 ppm 15 minutes. STEL: 885 mg/m ³ 15 minutes. NIOSH REL (United States, 10/2013). TWA: 200 ppm 10 hours. TWA: 590 mg/m ³ 10 hours. STEL: 300 ppm 15 minutes. STEL: 885 mg/m ³ 15 minutes. OSHA PEL (United States, 2/2013). TWA: 200 ppm 8 hours. TWA: 590 mg/m ³ 8 hours. ACGIH TLV (United States, 3/2015). TWA: 100 ppm 8 hours. TWA: 434 mg/m ³ 8 hours. STEL: 150 ppm 15 minutes. STEL: 651 mg/m ³ 15 minutes. OSHA PEL (United States, 2/2013). TWA: 100 ppm 8 hours. TWA: 435 mg/m ³ 8 hours.
Medium Aromatic Hydrocarbons Carbon Black	None. NIOSH REL (United States, 10/2013). TWA: 3.5 mg/m ³ 10 hours. TWA: 0.1 mg of PAHs/cm ³ 10 hours. OSHA PEL (United States, 2/2013). TWA: 3.5 mg/m ³ 8 hours. ACGIH TLV (United States, 3/2015). TWA: 3 mg/m ³ 8 hours. Form: Inhalable fraction
Ethylbenzene	ACGIH TLV (United States, 3/2015). TWA: 20 ppm 8 hours. NIOSH REL (United States, 10/2013). TWA: 100 ppm 10 hours. TWA: 435 mg/m ³ 10 hours. STEL: 125 ppm 15 minutes. STEL: 545 mg/m ³ 15 minutes. OSHA PEL (United States, 2/2013). TWA: 100 ppm 8 hours. TWA: 435 mg/m ³ 8 hours.
Naphthalene	ACGIH TLV (United States, 3/2015). Absorbed through skin. TWA: 10 ppm 8 hours. TWA: 52 mg/m ³ 8 hours. NIOSH REL (United States, 10/2013). TWA: 10 ppm 10 hours. TWA: 50 mg/m ³ 10 hours. STEL: 15 ppm 15 minutes. STEL: 75 mg/m ³ 15 minutes. OSHA PEL (United States, 2/2013). TWA: 10 ppm 8 hours. TWA: 50 mg/m ³ 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

:

Section 8. Exposure controls/personal protection

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**
- Hand protection** : 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.
- Body protection** : 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.
- Other skin protection** : 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.
- Respiratory protection** : 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

Physical state	: Liquid.
Color	: Not available.
Odor	: Not available.
Odor threshold	: Not available.
pH	: Not available.
Melting point	: Not available.
Boiling point	: 78°C (172.4°F)
Flash point	: Closed cup: 13°C (55.4°F) [Pensky-Martens Closed Cup]
Evaporation rate	: 5.6 (butyl acetate = 1)
Flammability (solid, gas)	: Not available.
Lower and upper explosive (flammable) limits	: Lower: 0.8% Upper: 13.1%
Vapor pressure	: 1.6 kPa (12.079 mm Hg) [at 20°C]
Vapor density	: 2.48 [Air = 1]
Relative density	: 1.28

Section 9. Physical and chemical properties

Solubility	: Not available.
Partition coefficient: n-octanol/water	: Not available.
Auto-ignition temperature	: Not available.
Decomposition temperature	: Not available.
Viscosity	: Kinematic (room temperature): >0.205 cm ² /s (>20.5 cSt) Kinematic (40°C (104°F)): >0.205 cm ² /s (>20.5 cSt)
Molecular weight	: Not applicable.
Aerosol product	
Heat of combustion	: 8.468 kJ/g

Section 10. Stability and reactivity

Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	: The product is stable.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Do not allow vapor to accumulate in low or confined areas.
Incompatible materials	: Reactive or incompatible with the following materials: oxidizing materials
Hazardous decomposition products	: 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
n-Butyl Acetate	LD50 Dermal	Rabbit	>17600 mg/kg	-
	LD50 Oral	Rat	10768 mg/kg	-
Methyl Ethyl Ketone	LD50 Dermal	Rabbit	6480 mg/kg	-
	LD50 Oral	Rat	2737 mg/kg	-
Xylene	LC50 Inhalation Gas.	Rat	5000 ppm	4 hours
	LD50 Oral	Rat	4300 mg/kg	-
Carbon Black	LD50 Oral	Rat	>15400 mg/kg	-
Ethylbenzene	LD50 Dermal	Rabbit	>5000 mg/kg	-
	LD50 Oral	Rat	3500 mg/kg	-
Naphthalene	LD50 Dermal	Rabbit	>20 g/kg	-
	LD50 Oral	Rat	490 mg/kg	-

Irritation/Corrosion

Section 11. Toxicological information

Product/ingredient name	Result	Species	Score	Exposure	Observation
n-Butyl Acetate	Eyes - Moderate irritant	Rabbit	-	100 milligrams	-
	Skin - Moderate irritant	Rabbit	-	24 hours 500 milligrams	-
Methyl Ethyl Ketone	Skin - Mild irritant	Rabbit	-	24 hours 14 milligrams	-
	Skin - Moderate irritant	Rabbit	-	24 hours 500 milligrams	-
Xylene	Eyes - Mild irritant	Rabbit	-	87 milligrams	-
	Eyes - Severe irritant	Rabbit	-	24 hours 5 milligrams	-
	Skin - Mild irritant	Rat	-	8 hours 60 microliters	-
Medium Aromatic Hydrocarbons	Skin - Moderate irritant	Rabbit	-	24 hours 500 milligrams	-
	Skin - Mild irritant	Rabbit	-	100 Percent	-
	Eyes - Severe irritant	Rabbit	-	24 hours 500 microliters	-
Ethylbenzene	Skin - Mild irritant	Rabbit	-	500 milligrams	-
	Skin - Moderate irritant	Rabbit	-	24 hours 15 milligrams	-
Naphthalene	Skin - Mild irritant	Rabbit	-	495 milligrams	-
	Skin - Severe irritant	Rabbit	-	24 hours 0.05 Milliliters	-

Sensitization

Not available.

Mutagenicity

Not available.

Carcinogenicity

Not available.

Classification

Product/ingredient name	OSHA	IARC	NTP
crystalline silica, respirable powder	-	1	Known to be a human carcinogen.
Xylene	-	3	-
Carbon Black	-	2B	-
Ethylbenzene	-	2B	-
Naphthalene	-	2B	Reasonably anticipated to be a human carcinogen.

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Section 11. Toxicological information

Name	Category	Route of exposure	Target organs
Methyl Ethyl Ketone	Category 3	Not applicable.	Respiratory tract irritation and Narcotic effects
Xylene	Category 3	Not applicable.	Respiratory tract irritation and Narcotic effects
Medium Aromatic Hydrocarbons	Category 3	Not applicable.	Respiratory tract irritation and Narcotic effects
Ethylbenzene	Category 3	Not applicable.	Respiratory tract irritation and Narcotic effects
Naphthalene	Category 3	Not applicable.	Respiratory tract irritation and Narcotic effects

Specific target organ toxicity (repeated exposure)

Name	Category	Route of exposure	Target organs
crystalline silica, respirable powder	Category 1	Inhalation	Not determined
Methyl Ethyl Ketone	Category 2	Not determined	Not determined
Xylene	Category 2	Not determined	Not determined
Medium Aromatic Hydrocarbons	Category 2	Not determined	Not determined
Ethylbenzene	Category 2	Not determined	Not determined
Naphthalene	Category 2	Not determined	Not determined

Aspiration hazard

Name	Result
Xylene	ASPIRATION HAZARD - Category 1
Ethylbenzene	ASPIRATION HAZARD - Category 1
Naphthalene	ASPIRATION HAZARD - Category 1

Information on the likely routes of exposure : Not available.

Potential acute health effects

Eye contact : Causes serious eye irritation.
Inhalation : No known significant effects or critical hazards.
Skin contact : Causes skin irritation.
Ingestion : No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

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

Inhalation : No specific data.

Skin contact : Adverse symptoms may include the following:
 irritation
 redness

Ingestion : No specific data.

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** : Causes damage to organs through prolonged or repeated exposure.
Carcinogenicity : May cause cancer. Risk of cancer depends on duration and level of exposure.
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 : No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Route	ATE value
Oral	23573.9 mg/kg
Inhalation (gases)	80302.7 ppm

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
n-Butyl Acetate	Acute LC50 32000 µg/l Marine water	Crustaceans - Artemia salina - Nauplii	48 hours
Methyl Ethyl Ketone	Acute LC50 18000 µg/l Fresh water	Fish - Pimephales promelas	96 hours
	Acute EC50 >500000 µg/l Marine water	Algae - Skeletonema costatum	96 hours
	Acute EC50 5091000 µg/l Fresh water	Daphnia - Daphnia magna - Larvae	48 hours
Xylene	Acute LC50 3220000 µg/l Fresh water	Fish - Pimephales promelas	96 hours
	Acute LC50 8500 µg/l Marine water	Crustaceans - Palaemonetes pugio	48 hours
Ethylbenzene	Acute LC50 13400 µg/l Fresh water	Fish - Pimephales promelas	96 hours
	Acute EC50 4600 µg/l Fresh water	Algae - Pseudokirchneriella subcapitata	72 hours
	Acute EC50 3600 µg/l Fresh water	Algae - Pseudokirchneriella subcapitata	96 hours
	Acute EC50 6530 µg/l Fresh water	Crustaceans - Artemia sp. - Nauplii	48 hours
Naphthalene	Acute EC50 2930 µg/l Fresh water	Daphnia - Daphnia magna - Neonate	48 hours
	Acute LC50 4200 µg/l Fresh water	Fish - Oncorhynchus mykiss	96 hours
	Acute EC50 1600 µg/l Fresh water	Daphnia - Daphnia magna - Neonate	48 hours
	Acute LC50 2350 µg/l Marine water	Crustaceans - Palaemonetes pugio	48 hours
	Acute LC50 213 µg/l Fresh water	Fish - Melanotaenia fluviatilis - Larvae	96 hours

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Section 12. Ecological information

Persistence and degradability

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
n-Butyl Acetate	-	-	Readily
Methyl Ethyl Ketone	-	-	Readily
Xylene	-	-	Readily
Ethylbenzene	-	-	Readily

Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
Xylene	-	8.1 to 25.9	low
Medium Aromatic Hydrocarbons	-	99 to 5780	high
Naphthalene	-	36.5 to 168	low

Mobility in soil






Soil/water partition coefficient (K_{oc}) : 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. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	DOT Classification	TDG Classification	Mexico Classification	IATA	IMDG
UN number	UN1263	UN1263	UN1263	UN1263	UN1263
UN proper shipping name	PAINT	PAINT	PAINT	PAINT	PAINT
Transport hazard class(es)	3 	3 	3 	3 	3 
Packing group	II	II	II	II	II

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Section 14. Transport information

Environmental hazards	No.	No.	No.	No.	No.
Additional information	<u>Special provisions</u> Not Applicable <u>ERG No.</u> 128	Product classified as per the following sections of the Transportation of Dangerous Goods Regulations: 2.18-2.19 (Class 3). <u>Special provisions</u> Not Applicable <u>ERG No.</u> 128	<u>Special provisions</u> Not Applicable <u>ERG No.</u> 128	<u>Special provisions</u> Not Applicable	<u>Emergency schedules (EmS)</u> F-E, S-E <u>Special provisions</u> Not Applicable

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		3
Physical hazards		0

The customer is responsible for determining the PPE code for this material.

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 are not required on SDSs 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 mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

Procedure used to derive the classification

Classification

FLAMMABLE LIQUIDS - Category 2
SKIN CORROSION/IRRITATION - Category 2
SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A
CARCINOGENICITY - Category 1A
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1

Justification

On basis of test data
Calculation method
Calculation method
Calculation method
Calculation method

History

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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.

Safety Data Sheet



1. Identification

Product Name: ACRYLC 1-GL 2PK 5200 SAFETY YELLOW **Revision Date:** 8/3/2015
Product Identifier: 5244402 **Supersedes Date:** 8/27/2014
Product Use/Class: Topcoat/Water-based Acrylic Latex
Supplier: Rust-Oleum Corporation **Manufacturer:** Rust-Oleum Corporation
 11 Hawthorn Parkway 11 Hawthorn Parkway
 Vernon Hills, IL 60061 Vernon Hills, IL 60061
 USA USA
Preparer: Regulatory Department
Emergency Telephone: 24 Hour Hotline: 847-367-7700

2. Hazard Identification

Classification

Symbol(s) of Product

Not a hazardous substance or mixture.

Signal Word

No Signal Word has been assigned.

3. Composition/Information On Ingredients

HAZARDOUS SUBSTANCES

<u>Chemical Name</u>	<u>CAS-No.</u>	<u>Wt.% Range</u>	<u>GHS Symbols</u>	<u>GHS Statements</u>
Titanium Dioxide	13463-67-7	2.5-10	No Information	No Information
2,2,4-Trimethyl-1,3-Pentanediol Isobutyrate	25265-77-4	2.5-10	No Information	No Information
Diethylene Glycol Monomethyl Ether	111-77-3	1.0-2.5	GHS06	H311

4. First-aid Measures

FIRST AID - EYE CONTACT: Immediately flush eyes with plenty of water for at least 15 minutes holding eyelids open. Get medical attention. Do NOT allow rubbing of eyes or keeping eyes closed.

FIRST AID - SKIN CONTACT: Wash skin with soap and water. Remove contaminated clothing. Get medical attention if irritation develops or persists.

FIRST AID - INHALATION: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get immediate medical attention. Do NOT use mouth-to-mouth resuscitation. If you experience difficulty in breathing, leave the area to obtain fresh air. If continued difficulty is experienced, get medical assistance immediately.

FIRST AID - INGESTION: If swallowed, rinse mouth with water. If feeling unwell, get medical attention. Swallowing less than an ounce will not cause significant harm. For larger amounts, do not induce vomiting, but give one or two glasses of water to drink and get medical attention.

5. Fire-fighting Measures

EXTINGUISHING MEDIA: Alcohol Film Forming Foam, Carbon Dioxide, Dry Chemical, Water Fog

UNUSUAL FIRE AND EXPLOSION HAZARDS: Keep containers tightly closed. FLASH POINT IS TESTED TO BE GREATER THAN 200 DEGREES F. No unusual fire or explosion hazards noted.

SPECIAL FIREFIGHTING PROCEDURES: Water may be used to cool closed containers to prevent buildup of steam. If water is used, fog nozzles are preferred.

6. Accidental Release Measures

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED: If spilled, contain spilled material and remove with inert absorbent. Dispose of contaminated absorbent, container, and unused contents in accordance with local, state, and federal regulations. Do not incinerate closed containers. Dispose of according to local, state (provincial) and federal regulations. Do not incinerate closed containers.

7. Handling and Storage

HANDLING: Wash thoroughly after handling. Wash hands before eating. Remove contaminated clothing and launder before reuse. Use only with adequate ventilation. Follow all MSDS/label precautions even after container is emptied because it may retain product residues. Avoid breathing fumes, vapors, or mist. Avoid contact with eyes, skin and clothing. Avoid contact with eyes.

STORAGE: Store in a dry, well ventilated place. Keep container tightly closed when not in use. Keep from freezing. Keep container closed when not in use.

8. Exposure Controls/Personal Protection

Chemical Name	CAS-No.	Weight % Less Than	ACGIH TLV- TWA	ACGIH TLV- STEL	OSHA PEL-TWA	OSHA PEL- CEILING
Titanium Dioxide	13463-67-7	10.0	10 mg/m ³	N.E.	15 mg/m ³	N.E.
2,2,4-Trimethyl-1,3-Pentanediol Isobutyrate	25265-77-4	5.0	N.E.	N.E.	N.E.	N.E.
Diethylene Glycol Monomethyl Ether	111-77-3	5.0	N.E.	N.E.	N.E.	N.E.

PERSONAL PROTECTION

ENGINEERING CONTROLS: Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Prevent build-up of vapors by opening all doors and windows to achieve cross-ventilation.

RESPIRATORY PROTECTION: A respiratory protection program that meets OSHA 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.

SKIN PROTECTION: Use gloves to prevent prolonged skin contact. Nitrile or Neoprene gloves may afford adequate skin protection.

EYE PROTECTION: Use safety eyewear designed to protect against splash of liquids.

OTHER PROTECTIVE EQUIPMENT: Refer to safety supervisor or industrial hygienist for further guidance regarding types of personal protective equipment and their applications. Refer to safety supervisor or industrial hygienist for further information regarding personal protective equipment and its application.

HYGIENIC PRACTICES: Wash thoroughly with soap and water before eating, drinking or smoking. Remove contaminated clothing immediately and launder before reuse.

9. Physical and Chemical Properties

Appearance:	Liquid	Physical State:	Liquid
Odor:	Solvent Like	Odor Threshold:	N.E.
Relative Density:	1.094	pH:	N.D.
Freeze Point, °C:	32	Viscosity:	N.D.
Solubility in Water:	Slight	Partition Coefficient, n-octanol/ water:	N.D.
Decomposition Temp., °C:	N.D.	Explosive Limits, vol%:	0.6 - 22.0
Boiling Range, °C:	-18 - 244	Flash Point, °C:	94
Flammability:	Does not Support Combustion	Auto-ignition Temp., °C:	N.D.
Evaporation Rate:	Slower than Ether	Vapor Pressure:	N.D.
Vapor Density:	Heavier than Air		

(See "Other information" Section for abbreviation legend)

10. Stability and Reactivity

CONDITIONS TO AVOID: Avoid contact with strong acid and strong bases.

INCOMPATIBILITY: Incompatible with strong oxidizing agents, strong acids and strong alkalies.

HAZARDOUS DECOMPOSITION: By open flame, carbon monoxide and carbon dioxide. When heated to decomposition, it emits acid smoke and irritating fumes.

HAZARDOUS POLYMERIZATION: Will not occur under normal conditions.

STABILITY: This product is stable under normal storage conditions.

11. Toxicological information

EFFECTS OF OVEREXPOSURE - EYE CONTACT: Causes eye irritation. Irritating, and may injure eye tissue if not removed promptly.

EFFECTS OF OVEREXPOSURE - SKIN CONTACT: Substance may cause slight skin irritation. Low hazard for usual industrial handling or commercial handling by trained personnel.

EFFECTS OF OVEREXPOSURE - INHALATION: High gas, vapor, mist or dust concentrations may be harmful if inhaled. Avoid breathing fumes, spray, vapors, or mist. Low hazard for usual industrial handling or commercial handling by trained personnel.

EFFECTS OF OVEREXPOSURE - INGESTION: Substance may be harmful if swallowed.

EFFECTS OF OVEREXPOSURE - CHRONIC HAZARDS: Contains Titanium Dioxide. Titanium Dioxide is listed as a Group 2B-"Possibly carcinogenic to humans" by IARC. No significant exposure to Titanium Dioxide is thought to occur during the use of products in which Titanium Dioxide is bound to other materials, such as in paints during brush application or drying. Risk of overexposure depends on duration and level of exposure to dust from repeated sanding of surfaces or spray mist and the actual concentration of Titanium Dioxide in the formula. (Ref: IARC Monograph, Vol. 93, 2010)

PRIMARY ROUTE(S) OF ENTRY: Eye Contact, Ingestion, Inhalation, Skin Absorption, Skin Contact

ACUTE TOXICITY VALUES

The acute effects of this product have not been tested. Data on individual components are tabulated below:

<u>CAS-No.</u>	<u>Chemical Name</u>	<u>Oral LD50</u>	<u>Dermal LD50</u>	<u>Vapor LC50</u>
13463-67-7	Titanium Dioxide	>10000 mg/kg Rat	N.I.	N.I.
25265-77-4	2,2,4-Trimethyl-1,3-Pentanediol Isobutyrate	3200 mg/kg Rat	>15200 mg/kg Rat	N.I.
111-77-3	Diethylene Glycol Monomethyl Ether	N.I.	650 mg/kg Rabbit	N.I.

N.I. - No Information

12. Ecological Information

ECOLOGICAL INFORMATION: Product is a mixture of listed components.

13. Disposal Information

DISPOSAL INFORMATION: Dispose of material in accordance to local, state, and federal regulations and ordinances. Do not allow to enter waterways, wastewater, soil, storm drains or sewer systems.

14. Transport Information

	<u>Domestic (USDOT)</u>	<u>International (IMDG)</u>	<u>Air (IATA)</u>	<u>TDG (Canada)</u>
UN Number:	N.A.	N.A.	N.A.	N.A.
Proper Shipping Name:	Not Regulated	Not Regulated	Not Regulated	Not Regulated
Hazard Class:	N.A.	N.A.	N.A.	N.A.
Packing Group:	N.A.	N.A.	N.A.	N.A.
Limited Quantity:	No	No	No	No

15. Regulatory Information

U.S. Federal Regulations:

CERCLA - SARA Hazard Category

This product has been reviewed according to the EPA 'Hazard Categories' promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

Acute Health Hazard, Chronic Health Hazard

Sara Section 313:

This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR part 372:

<u>Chemical Name</u>	<u>CAS-No.</u>
Diethylene Glycol Monomethyl Ether	111-77-3

Toxic Substances Control Act:

This product contains the following chemical substances subject to the reporting requirements of TSCA 12(b) if exported from the United States:

<u>Chemical Name</u>	<u>CAS-No.</u>
5-Chloro-2-Methyl-4-Isothiazolin-3-one	26172-55-4
Methyl-4-Isothiazolin-3-one	2682-20-4
2-Ethoxyethanol	110-80-5

16. Other Information

HMIS RATINGS

Health: 2* Flammability: 1 Physical Hazard: 0 Personal Protection: X

NFPA RATINGS

Health: 2 Flammability: 1 Instability: 0

VOLATILE ORGANIC COMPOUNDS, g/L: 227

SDS REVISION DATE: 8/3/2015

REASON FOR REVISION: Product Composition Changed
 Substance and/or Product Properties Changed in Section(s):
 01 - Identification
 02 - Hazard Identification
 05 - Fire-fighting Measures
 09 - Physical & Chemical Properties
 15 - Regulatory Information
 16 - Other Information
 Statement(s) Changed

Legend: N.A. - Not Applicable, N.E. - Not Established, N.D. - Not Determined

Rust-Oleum Corporation believes, to the best of its knowledge, information and belief, the information contained herein to be accurate and reliable as of the date of this safety data sheet. However, because the conditions of handling, use, and storage of these materials are beyond our control, we assume no responsibility or liability for personal injury or property damage incurred by the use of these materials. Rust-Oleum Corporation makes no warranty, expressed or implied, regarding the accuracy or reliability of the data or results obtained from their use. All materials may present unknown hazards and should be used with caution. The information and recommendations in this material safety data sheet are offered for the users' consideration and examination. It is the responsibility of the user to determine the final suitability of this information and to comply with all applicable international, federal, state, and local laws and regulations.

INSLX

SAFETY DATA SHEET

Revision Date: 22-Sep-2015

Revision Number: 1

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name ACRYLIC FIELD MARKING PAINT WHITE
Product Code FM-6501
Alternate Product Code TY7901
Product Class WATER THINNED PAINT
Color White
Recommended use Paint
Restrictions on use No information available

Manufacturer
Benjamin Moore & Co.
101 Paragon Drive
Montvale, NJ 07645
Phone: 800-225-5554
insl-x.com

Emergency Telephone Number(s)
CHEMTREC (US): 800-424-9300
CHEMTREC (outside US): (703)-527-3887

Classification

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Label elements

Not a dangerous substance or mixture according to the Globally Harmonized System (GHS)

Appearance liquid

Odor little or no odor

Hazards not otherwise classified (HNOC)

Not Applicable

Other information

No information available

Chemical Name	CAS-No	Weight % (max)
Kaolin	1332-58-7	20

Limestone	1317-65-3	10
Titanium dioxide	13463-67-7	10
Nepheline syenite	37244-96-5	5
Zinc oxide	1314-13-2	0.5

4. FIRST AID MEASURES

General Advice	No hazards which require special first aid measures.
Eye Contact	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
Skin Contact	Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes.
Inhalation	Move to fresh air. If symptoms persist, call a physician.
Ingestion	Clean mouth with water and afterwards drink plenty of water. Consult a physician if necessary.
Most Important Symptoms/Effects	None known.
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.
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.
Specific Hazards Arising From The Chemical	Closed containers may rupture if exposed to fire or extreme heat.
Sensitivity To Mechanical Impact	No
Sensitivity To Static Discharge	No
Flash Point Data	
Flash Point (°F)	Not applicable
Flash Point (°C)	Not applicable
Flash Point Method	Not applicable
Flammability Limits In Air	
Lower Explosion Limit	Not applicable
Upper Explosion Limit	Not applicable

NFPA Health: 1 Flammability: 0 Instability: 0 Special: Not Applicable

NFPA Legend

- 0 - Not Hazardous
- 1 - Slightly
- 2 - Moderate
- 3 - High
- 4 - Severe

The ratings assigned are only suggested ratings, the contractor/employer has ultimate responsibilities for NFPA ratings where this system is used.

Additional information regarding the NFPA rating system is available from the National Fire Protection Agency (NFPA) at www.nfpa.org.

8. ACCIDENTAL RELEASE MEASURES

- Personal Precautions** Avoid contact with skin, eyes and clothing. Ensure adequate ventilation.
- Other Information** Prevent further leakage or spillage if safe to do so.
- Environmental Precautions** See Section 12 for additional Ecological Information.
- Methods For Clean-Up** Soak up with inert absorbent material. Sweep up and shovel into suitable containers for disposal.

9. HANDLING AND STORAGE

- Handling** Avoid contact with skin, eyes and clothing. Avoid breathing vapors, spray mists or sanding dust. In case of insufficient ventilation, wear suitable respiratory equipment.
- Storage** Keep container tightly closed. Keep out of the reach of children.
- Incompatible Materials** No information available

10. EXPOSURE LIMITS

Exposure Limits

Chemical Name	ACGIH	OSHA
Kaolin	2 mg/m ³ - TWA	15 mg/m ³ - TWA total 5 mg/m ³ - TWA
Limestone	N/E	15 mg/m ³ - TWA total 5 mg/m ³ - TWA
Titanium dioxide	10 mg/m ³ - TWA	15 mg/m ³ - TWA
Nepheline syenite	N/E	5 mg/m ³ - TWA (nuisance dust)
Zinc oxide	2 mg/m ³ - TWA 10 mg/m ³ - STEL	5 mg/m ³ - TWA 15 mg/m ³ - TWA

- Engineering Measures** Ensure adequate ventilation, especially in confined areas.
- Personal Protective Equipment**
 - Eye/Face Protection** Safety glasses with side-shields.
 - Skin Protection** Protective gloves and impervious clothing.
 - Respiratory Protection** In case of insufficient ventilation wear suitable respiratory equipment.
- Hygiene Measures** Avoid contact with skin, eyes and clothing. Remove and wash contaminated clothing before re-use. Wash thoroughly after handling.

D. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	liquid
Odor	little or no odor
Odor Threshold	No information available
Density (lbs/gal)	10.8 - 11.1
Specific Gravity	1.29 - 1.33
pH	No information available
Viscosity (cps)	No information available
Solubility	No information available
Water Solubility	No information available
Evaporation Rate	No information available
Vapor Pressure	No information available
Vapor Density	No information available
Wt. % Solids	45 - 55
Vol. % Solids	25 - 35
Wt. % Volatiles	45 - 55
Vol. % Volatiles	65 - 75
VOC Regulatory Limit (g/L)	< 50
Boiling Point (°F)	212
Boiling Point (°C)	100
Freezing Point (°F)	32
Freezing Point (°C)	0
Flash Point (°F)	Not applicable
Flash Point (°C)	Not applicable
Flash Point Method	Not applicable
Flammability (solid, gas)	Not applicable
Upper Explosion Limit	Not applicable
Lower Explosion Limit	Not applicable
Autoignition Temperature (°F)	No information available
Autoignition Temperature (°C)	No information available
Decomposition Temperature (°F)	No information available
Decomposition Temperature (°C)	No information available
Partition Coefficient (n-octanol/water)	No information available

E. TOXICITY AND HAZARD INFORMATION

Reactivity	Not Applicable
Chemical Stability	Stable under normal conditions.
Conditions To Avoid	Prevent from freezing.
Incompatible Materials	No materials to be especially mentioned.
Hazardous Decomposition Products	None under normal use.
Possibility Of Hazardous Reactions	None under normal conditions of use.

F. ENVIRONMENTAL IMPACT INFORMATION

Product Information

Information on likely routes of exposure

Principal Routes of Exposure Eye contact, skin contact and inhalation.

Acute Toxicity

Product Information No information available

Information on toxicological effects

Symptoms No information available

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

Eye contact	May cause slight irritation.
Skin contact	Substance may cause slight skin irritation. Prolonged or repeated contact may dry skin and cause irritation.
Inhalation	May cause irritation of respiratory tract.
Ingestion	Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.
Sensitization:	No information available
Neurological Effects	No information available.
Mutagenic Effects	No information available.
Reproductive Effects	No information available.
Developmental Effects	No information available.
Target Organ Effects	No information available.
STOT - single exposure	No information available.
STOT - repeated exposure	No information available.
Other adverse effects	No information available.
Aspiration Hazard	No information available

Numerical measures of toxicity

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral) 199401 mg/kg

Component

Acute Toxicity

Kaolin
 LD50 Oral: > 5000 mg/kg (Rat)

Limestone
 LD50 Oral: 6,450 mg/kg (Rat) vendor data

Titanium dioxide
 LD50 Oral: > 10000 mg/kg (Rat)
 LD50 Dermal: > 10000 mg/m³ (Rabbit)
 LC50 Inhalation (Dust): > 6.82 mg/L (Rat, 4 hr.)

Zinc oxide
 LD50 Oral: 5000 mg/kg (Rat)
 LC50 Inhalation (Dust): > 5700 mg/m³ (Rat, 4 hr.)

Carcinogenicity

The information below indicates whether each agency has listed any ingredient as a carcinogen.:

Chemical Name	IARC	NTP	OSHA Carcinogen
Titanium dioxide	2B - Possible Human Carcinogen		Listed

• Although IARC has classified titanium dioxide as possibly carcinogenic to humans (2B), their summary concludes: "No significant exposure to titanium dioxide is thought to occur during the use of products in which titanium dioxide is bound to other materials, such as paint."

Legend

IARC - International Agency for Research on Cancer
 NTP - National Toxicity Program
 OSHA - Occupational Safety & Health Administration



Ecotoxicity Effects

The environmental impact of this product has not been fully investigated.

Product Information

Acute Toxicity to Fish
 No information available

Acute Toxicity to Aquatic Invertebrates
 No information available

Acute Toxicity to Aquatic Plants
 No information available

Persistence / Degradability
 No information available.

Bioaccumulation / Accumulation
 No information available.

Mobility in Environmental Media
 No information available.

Ozone
 No information available

Component

Acute Toxicity to Fish

Titanium dioxide
 LC50: > 1000 mg/L (Fathead Minnow - 96 hr.)

Acute Toxicity to Aquatic Invertebrates
 No information available

Acute Toxicity to Aquatic Plants
 No information available

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method Dispose of in accordance with federal, state, provincial, and local regulations. Local requirements may vary, consult your sanitation department or state-designated environmental protection agency for more disposal options.

14. TRANSPORT INFORMATION

DOT Not regulated
ICAO / IATA Not regulated
IMDG / IMO Not regulated

15. REGULATORY INFORMATION

International Inventories

TSCA: United States Yes - All components are listed or exempt.
DSL: Canada No - Not all of the components are listed.
 One or more component is listed on NDSL.

Federal Regulations

SARA 311/312 hazardous categorization

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

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

None

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

This product contains the following HAPs:

None

State Regulations

California Proposition 65

This product may contain small amounts of materials known to the state of California to cause cancer or reproductive harm.

State Right-to-Know

Disclaimer

The information contained herein is presented in good faith and believed to be accurate as of the effective date shown above. This information 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 determination of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees. Any use of this data and information must be determined by the user to be in accordance with applicable federal, provincial, and local laws and regulations.

END OF SAFETY DATA SHEET

INSLX

SAFETY DATA SHEET

Revision Date: 27-Jun-2018

Revision Number: 2

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name ACRYLIC FIELD MARKING PAINT YELLOW
Product Code FM-6510
Alternate Product Code TY7910
Product Class WATER THINNED PAINT
Color Yellow
Recommended use Paint
Restrictions on use No information available

Manufacturer
Benjamin Moore & Co.
101 Paragon Drive
Montvale, NJ 07645
Phone: 1-866-708-9180
insl-x.com

Emergency Telephone
CHEMTREC (US): 800-424-9300
CHEMTREC (outside US): (703)-527-3887

2. HAZARDS IDENTIFICATION

Classification

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Label elements

Not a hazardous substance or mixture according to the Globally Harmonized System (GHS)

Appearance liquid

Odor little or no odor

Hazards not otherwise classified (HNOC)

Not applicable

Other information

No information available

3. COMPOSITION INFORMATION ON COMPONENTS

Chemical name	CAS No.	Weight-%
---------------	---------	----------

Limestone	1317-65-3	40
Kaolin	1332-58-7	5
Titanium dioxide	13463-67-7	5

4. FIRST AID MEASURES

General Advice	No hazards which require special first aid measures.
Eye Contact	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
Skin Contact	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes.
Inhalation	Move to fresh air. If symptoms persist, call a physician.
Ingestion	Clean mouth with water and afterwards drink plenty of water. Consult a physician if necessary.
Most Important Symptoms/Effects	None known.
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.
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.
Specific Hazards Arising From The Chemical	Closed containers may rupture if exposed to fire or extreme heat.
Sensitivity To Mechanical Impact	No
Sensitivity To Static Discharge	No
Flash Point Data	
Flash Point (°F)	Not applicable
Flash Point (°C)	Not applicable
Method	Not applicable
Flammability Limits In Air	
Lower flammability limit:	Not applicable
Upper flammability limit:	Not applicable

NFPA Health: 1 Flammability: 0 Instability: 0 Special: Not Applicable

NFPA Legend

- 0 - Not Hazardous
- 1 - Slightly
- 2 - Moderate
- 3 - High
- 4 - Severe

The ratings assigned are only suggested ratings, the contractor/employer has ultimate responsibilities for NFPA ratings where this system is used.

Additional information regarding the NFPA rating system is available from the National Fire Protection Agency (NFPA) at www.nfpa.org.

6. ACCIDENTAL RELEASE MEASURES

- Personal Precautions** Avoid contact with skin, eyes and clothing. Ensure adequate ventilation.
- Other Information** Prevent further leakage or spillage if safe to do so.
- Environmental precautions** See Section 12 for additional Ecological Information.
- Methods for Cleaning Up** Soak up with inert absorbent material. Sweep up and shovel into suitable containers for disposal.

7. HANDLING AND STORAGE

- Handling** Avoid contact with skin, eyes and clothing. Avoid breathing vapors, spray mists or sanding dust. In case of insufficient ventilation, wear suitable respiratory equipment.
- Storage** Keep container tightly closed. Keep out of the reach of children.
- Incompatible Materials** No information available

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Limits

Chemical name	ACGIH TLV	OSHA PEL
Limestone	N/E	15 mg/m ³ - TWA 5 mg/m ³ - TWA
Kaolin	2 mg/m ³ - TWA	15 mg/m ³ - TWA 5 mg/m ³ - TWA
Titanium dioxide	10 mg/m ³ - TWA	15 mg/m ³ - TWA

Legend

ACGIH - American Conference of Governmental Industrial Hygienists Exposure Limits
 OSHA - Occupational Safety & Health Administration Exposure Limits
 N/E - Not Established

- Engineering Measures** Ensure adequate ventilation, especially in confined areas.
- Personal Protective Equipment**
 - Eye/Face Protection** Safety glasses with side-shields.
 - Skin Protection** Protective gloves and impervious clothing.
 - Respiratory Protection** In case of insufficient ventilation wear suitable respiratory equipment.

Hygiene Measures

Avoid contact with skin, eyes and clothing. Remove and wash contaminated clothing before re-use. Wash thoroughly after handling.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	liquid
Odor	little or no odor
Odor Threshold	No information available
Density (lbs/gal)	11.5 - 11.9
Specific Gravity	1.38 - 1.42
pH	No information available
Viscosity (cps)	No information available
Solubility(ies)	No information available
Water solubility	No information available
Evaporation Rate	No information available
Vapor pressure @20 °C (kPa)	No information available
Vapor density	No information available
Wt. % Solids	45 - 55
Vol. % Solids	25 - 35
Wt. % Volatiles	45 - 55
Vol. % Volatiles	65 - 75
VOC Regulatory Limit (g/L)	< 50
Boiling Point (°F)	212
Boiling Point (°C)	100
Freezing Point (°F)	32
Freezing Point (°C)	0
Flash Point (°F)	Not applicable
Flash Point (°C)	Not applicable
Method	Not applicable
Flammability (solid, gas)	Not applicable
Upper flammability limit:	Not applicable
Lower flammability limit:	Not applicable
Autoignition Temperature (°F)	No information available
Autoignition Temperature (°C)	No information available
Decomposition Temperature (°F)	No information available
Decomposition Temperature (°C)	No information available
Partition coefficient	No information available

10. STABILITY AND REACTIVITY

Reactivity	Not Applicable
Chemical Stability	Stable under normal conditions.
Conditions to avoid	Prevent from freezing.
Incompatible Materials	No materials to be especially mentioned.
Hazardous Decomposition Products	None under normal use.
Possibility of hazardous reactions	None under normal conditions of use.

11. TOXICOLOGICAL INFORMATION

Product Information

Information on likely routes of exposure

Principal Routes of Exposure Eye contact, skin contact and inhalation.

Acute Toxicity

Product Information No information available

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms No information available

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

Eye contact May cause slight irritation.
Skin contact Substance may cause slight skin irritation. Prolonged or repeated contact may dry skin and cause irritation.
Inhalation May cause irritation of respiratory tract.
Ingestion Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.
Sensitization No information available
Neurological Effects No information available.
Mutagenic Effects No information available.
Reproductive Effects No information available.
Developmental Effects No information available.
Target organ effects No information available.
STOT - single exposure No information available.
STOT - repeated exposure No information available.
Other adverse effects No information available.
Aspiration Hazard No information available

Numerical measures of toxicity

ATEmix (oral) 501599

Component Information

Kaolin
 LD50 Oral: > 5000 mg/kg (Rat)
Titanium dioxide
 LD50 Oral: > 10000 mg/kg (Rat)

Carcinogenicity

The information below indicates whether each agency has listed any ingredient as a carcinogen:.

Chemical name	IARC	NTP	OSHA
Titanium dioxide	2B - Possible Human Carcinogen		Listed

• Although IARC has classified titanium dioxide as possibly carcinogenic to humans (2B), their summary concludes: "No significant exposure to titanium dioxide is thought to occur during the use of products in which titanium dioxide is bound to other materials, such as paint."

Legend

IARC - International Agency for Research on Cancer
NTP - National Toxicity Program
OSHA - Occupational Safety & Health Administration

12. ECOLOGICAL INFORMATION

Ecotoxicity Effects

The environmental impact of this product has not been fully investigated.

Product Information

Acute Toxicity to Fish

No information available

Acute Toxicity to Aquatic Invertebrates

No information available

Acute Toxicity to Aquatic Plants

No information available

Persistence / Degradability

No information available.

Bioaccumulation

No information available.

Mobility in Environmental Media

No information available.

Ozone

No information available

Component Information

Acute Toxicity to Fish

No information available

Titanium dioxide

LC50: > 1000 mg/L (Fathead Minnow - 96 hr.)

Acute Toxicity to Aquatic Invertebrates

No information available

Acute Toxicity to Aquatic Plants

No information available

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method

Dispose of in accordance with federal, state, and local regulations. Local requirements may vary, consult your sanitation department or state-designated environmental protection agency for more disposal options.

14. TRANSPORT INFORMATION

DOT Not regulated

ICAO / IATA Not regulated

IMDG / IMO Not regulated

15. REGULATORY INFORMATION

International Inventories

TSCA: United States Yes - All components are listed or exempt.
DSL: Canada Yes - All components are listed or exempt.
 One or more component is listed on NDSL.

Federal Regulations

SARA 311/312 hazardous categorization

Acute health hazard	No
Chronic Health Hazard	No
Fire hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

None

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

This product contains the following HAPs:

None

US State Regulations

California Proposition 65

 **WARNING:** Cancer and Reproductive Harm– www.P65warnings.ca.gov

State Right-to-Know

Chemical name	Massachusetts	New Jersey	Pennsylvania
Limestone	X	X	X
Kaolin	X	X	X
Titanium dioxide	X	X	X

Legend

X - Listed

16. OTHER INFORMATION**HMIS - Health: 1 Flammability: 0 Reactivity: 0 PPE: -****HMIS Legend**

0 - Minimal Hazard

1 - Slight Hazard

2 - Moderate Hazard

3 - Serious Hazard

4 - Severe Hazard

* - Chronic Hazard

X - Consult your supervisor or S.O.P. for "Special" handling instructions.

Note: The PPE rating has intentionally been left blank. Choose appropriate PPE that will protect employees from the hazards the material will present under the actual normal conditions of use.

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 are not required on MSDSs under 29 CFR 1910.1200, the preparer, has chosen to provide them. HMIS® ratings are to be used only in conjunction with a fully implemented HMIS® program by workers who have received appropriate HMIS® training. HMIS® is a registered trade and service mark of the NPCA. HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

WARNING! If you scrape, sand, or remove old paint, you may release lead dust. LEAD IS TOXIC. EXPOSURE TO LEAD DUST CAN CAUSE SERIOUS ILLNESS, SUCH AS BRAIN DAMAGE, ESPECIALLY IN CHILDREN. PREGNANT WOMEN SHOULD ALSO AVOID EXPOSURE. Wear a NIOSH approved respirator to control lead exposure. Clean up carefully with a HEPA vacuum and a wet mop. Before you start, find out how to protect yourself and your family by contacting the National Lead Information Hotline at 1-800-424-LEAD or log on to www.epa.gov/lead.

Prepared By Product Stewardship Department
Benjamin Moore & Co.
101 Paragon Drive
Montvale, NJ 07645
800-225-5554

Revision Date: 27-Jun-2018
Revision Summary Not available

Disclaimer

The information contained herein is presented in good faith and believed to be accurate as of the effective date shown above. This information 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 determination of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees. Any use of this data and information must be determined by the user to be in accordance with applicable federal, provincial, and local laws and regulations.

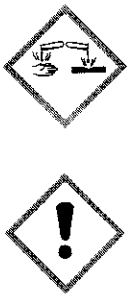
END OF SAFETY DATA SHEET

SAFETY DATA SHEET
(Prepared According to 29 CFR 1910. 1200)

SECTION 1 - IDENTIFICATION

Trade Name: AIRX 75	Product Use: RTU DISINFECTANT CLEANER	
Supplier: AIRX LABORATORIES	Phone #: 800-444-8900	Emergency Phone #: 800-255-3924
Address: 1640 Delmar Drive, PO Box 37, Folcroft, PA 19032	Code: RX75	

SECTION 2 - HAZARDS IDENTIFICATION

Classification: SEVERE EYE DAMAGE SKIN CORROSION/IRRITATION		Signal Word: DANGER	Symbol(s): 
GHS Hazard Statement:	Physical Hazards: None		
	Health Hazards: Causes skin irritation. Causes severe eye damage		
Precautionary Statements: Wear eye protection and protective gloves. Wash hands thoroughly after handling. If in eyes: Rinse cautiously with water for 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison control center or doctor. If on skin(or hair): Take off immediately all contaminated clothing. Wash with plenty of water. If skin irritation occurs: Get medical attention. Wash all contaminated clothing before reuse. In case of fire: use CO2, dry chemical, foam or water spray to extinguish. Store in a cool, well-ventilated place. Dispose of contents and container in accordance with local, state and federal regulations.			

SECTION 3 - COMPOSIT/INFORMATION ON INGREDIENTS

INGREDIENTS	CAS NO.	% BY WEIGHT	PEL (TLV)
n-Alkyl dimethyl ammonium chlorides	68391-01-5	0.105	Not est.
n-Alkyl ethylbenzyl ammonium chlorides	68956-79-6	0.105	Not est.
Diethylene Glycol Butyl Ether	112-34-5	5-10	Not. est.
Tetrasodium ethylenediamine tetraacetate	64-02-8	1-5	Not est.

* The specific chemical identity and exact percentage of this ingredient have been withheld as a trade secret.

SECTION 4 - HEALTH INFORMATION - FIRST AID MEASURES

Symptoms & Acute Effects: Causes skin and eye irritation.
Delayed Effects: None known
Typical Routes of Exposure: are the skin and eyes.
TREATMENT
Eyes: If in eyes: Rinse cautiously with water for 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a physician.
Skin: If on skin(or hair): Immediately remove all contaminated clothing. Wash with plenty of water. If skin irritation occurs: Get medical attention. Wash all contaminated clothing before reuse.
Ingestion: Drink large quantities of milk or water. Call a physician.
Inhalation: Not applicable

SECTION 5 - FIRE-FIGHTING MEASURES

Flash Point: none to boiling	Lower Explosive Limit: Not available	Upper Explosive Limit: Not available
Extinguishing Techniques: In case of fire: use CO2, dry chemical, foam, water spray to extinguish.		
Equipment: Do not enter any confined fire-spaces without protective clothing and self-contained air supply.		
Chemical Hazards from Fire: Carbon monoxide and unidentified organic gases may occur during incomplete combustion.		
Precautions for Fire Fighters: Cool fire exposed containers.		

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Steps to be Taken: SMALL AMOUNTS - Absorb with suitable absorbent. LARGE AMOUNTS - Absorb with suitable absorbent, then shovel into appropriately labeled containers.
Cleanup Procedures: Contain with absorbent material and dispose of in accordance with federal, state and local requirements.

SECTION 7 - HANDLING AND STORAGE

Precautions to be Take in Handling & Storage: Store in a cool, well-ventilated place.
Incompatibility: Strong oxidizers

SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION

INGREDIENTS:		EXPOSURE LIMITS	
Please refer to section 3			
Eye Protection: <input checked="" type="checkbox"/>	Protective Gloves: <input checked="" type="checkbox"/>	Respiratory Protection: <input type="checkbox"/>	
Ventilation Requirements	Local Exhaust: <input type="checkbox"/>	Mechanical: <input type="checkbox"/>	Room Ventilation is Adequate: <input checked="" type="checkbox"/>

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Appearance & Odor: Clear liquid, pleasant odor		Flammable Limits: Upper: Not available Lower: Not available	
Boiling Point (°F): Appx. 212	Specific Gravity (H2O) (±0.005): 1.010	pH (± 0.5) 12.0	
Vapor Pressure (mm Hg) Not available		Vapor Density (Air=1) Not available	
Solubility in Water: <input checked="" type="checkbox"/> Complete <input type="checkbox"/> Insoluble <input type="checkbox"/> Emulsifiable (or Dispersible) <input type="checkbox"/> Slightly (or Partial)			
Evaporation Rate (vs H2O) <input type="checkbox"/> Faster <input type="checkbox"/> Slower <input checked="" type="checkbox"/> About the Same			
Flash Point (T.C.C.): 212 °F	Odor Threshold: Not available	Melting point/frozen point: Not available	Partition Coefficient: n-octanol/water: Not available
Auto-Ignition Temperature: Not available	Decomposition Temperature: Not available	Viscosity: Not available	

SECTION 10 - STABILITY AND REACTIVITY

Stability: Stable	Incompatibility: Strong oxidizers
Hazardous Decomposition Products: Carbon monoxide and unidentified organic gases may occur during incomplete combustion.	

SECTION 11 - TOXICOLOGICAL INFORMATION

Acute Toxicity: LD50/oral/rat >5,000 mg/kg		Skin Sensitization: Not a sensitizer	
Skin Irritation: Causes skin irritation		Mutagenicity: Not a mutagen	
Eye Irritation: Causes eye irritation		Reproductive Toxicity: None	
Carcinogen/Suspect Carcinogen Ingredients:		<input type="checkbox"/> NTP	<input type="checkbox"/> OSHA <input type="checkbox"/> ARC <input checked="" type="checkbox"/> NONE

SECTION 12 - ECOLOGICAL INFORMATION

Ecotoxicity: Not reported

SECTION 13 - DISPOSAL CONSIDERATIONS

Waste Disposal Methods: Disposal as is a hazardous waste due to corrosivity . 40CFR261.22

SECTION 14 - TRANSPORT INFORMATION

Not regulated by USDOT.

SECTION 15 - REGULATORY INFORMATION

All ingredients in this product are listed on the TSCA Inventory.

SARA 302 Health Hazard: Acute

SARA 313 Chemicals: None

SECTION 16 - OTHER INFORMATION


DATE PREPARED: 1/13/2015

HMIS HAZARD RATINGS:

HEALTH	2
FLAMMABILITY	0
REACTIVITY	0
PERSONAL PROTECTION EQUIPMENT	B

SAFETY DATA SHEET
(Prepared According to 29 CFR 1910. 1200)

SECTION 1 - IDENTIFICATION		
Trade Name: AIRX SPRAY N GO DISINFECTANT CLEANER AND ODOR COUNTERACTANT		Product Use: DISINFECTANT CLEANER
Supplier: AIREX LABORATORIES	Phone #: 800-444-8900	Emergency Phone #: 800-255-3924
Address: 1640 Delmar Drive, PO Box 37, Folcroft, PA 19032		Code: 37-187A

SECTION 2 - HAZARDS IDENTIFICATION		
Classification: <small>SERIOUS EYE DAMAGE/EYE IRRITATION</small>		Signal Word: WARNING
GHS Hazard Statement:	Physical Hazards: None	
	Health Hazards: Causes eye irritation.	
Precautionary Statements: Wear eye protection and protective gloves. Wash hands thoroughly after handling. If in eyes: Rinse cautiously with water for 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison control center or doctor. If on skin(or hair): Take off immediately all contaminated clothing. Wash with plenty of water. If skin irritation occurs: Get medical attention. Wash all contaminated clothing before reuse. In case of fire: use CO2, dry chemical, foam or water spray to extinguish. Store in a cool, well-ventilated place. Dispose of contents and container in accordance with local, state and federal regulations.		

SECTION 3 - COMPOSIT/INFORMATION ON INGREDIENTS			
INGREDIENTS	CAS NO.	% BY WEIGHT	PEL (TLV)
Tetra Sodium Ethylenediamine Tetra Acetic Acid (Na4 EDTA)	64-02-8	1-<3	Not est.
Alkyl (68% C12, 32% C14) dimethyl ethylbenzyl ammonium chloride	68956-79-6	0.15	Not est.
Alkyl dimethyl benzyl ammonium chloride (C12-18)	68391-01-5	0.15	Not est.

* The specific chemical identity and exact percentage of this ingredient have been withheld as a trade secret.

SECTION 4 - HEALTH INFORMATION - FIRST AID MEASURES
Symptoms & Acute Effects: Causes skin and eye irritation.
Delayed Effects: None known
Typical Routes of Exposure: are the skin and eyes.
TREATMENT
Eyes: If in eyes: Rinse cautiously with water for 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a physician.
Skin: If on skin(or hair): Immediately remove all contaminated clothing. Wash with plenty of water. If skin irritation occurs: Get medical attention. Wash all contaminated clothing before reuse.
Ingestion: Drink large quantities of milk or water. Call a physician.
Inhalation: Move to fresh air. Call a physician if symptoms occur.

SECTION 5 - FIRE-FIGHTING MEASURES

Flash Point: 214F	Lower Explosive Limit: Not available	Upper Explosive Limit: Not available
Extinguishing Techniques: In case of fire: use CO2, dry chemical, foam, water spray to extinguish.		
Equipment: Do not enter any confined fire-spaces without protective clothing and self-contained air supply.		
Chemical Hazards from Fire: Carbon monoxide and unidentified organic gases may occur during incomplete combustion.		
Precautions for Fire Fighters: Cool fire exposed containers.		

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Steps to be Taken: SMALL AMOUNTS - Absorb with suitable absorbent. LARGE AMOUNTS - Absorb with suitable absorbent, then shovel into appropriately labeled containers.
Cleanup Procedures: Contain with absorbent material and dispose of in accordance with federal, state and local requirements.

SECTION 7 - HANDLING AND STORAGE

Precautions to be Take in Handling & Storage: Store in a cool, well-ventilated place.
Incompatibility: Strong oxidizers

SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION

INGREDIENTS:		EXPOSURE LIMITS	
Please refer to section 3			
Eye Protection: <input checked="" type="checkbox"/>	Protective Gloves: <input checked="" type="checkbox"/>	Respiratory Protection: <input type="checkbox"/>	
Ventilation Requirements	Local Exhaust: <input type="checkbox"/>	Mechanical: <input type="checkbox"/>	Room Ventilation is Adequate: <input checked="" type="checkbox"/>

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Appearance & Odor: Clear liquid, characteristic odor	Flammable Limits: Upper: Not available Lower: Not available		
Boiling Point (°F): Appx. 212	Specific Gravity (H2O) (±0.005): 1.008	pH (± 0.5) 11.9	
Vapor Pressure (mm Hg) Not available		Vapor Density (Air=1) Not available	
Solubility in Water: <input checked="" type="checkbox"/> Complete <input type="checkbox"/> Insoluble <input type="checkbox"/> Emulsifiable (or Dispersible) <input type="checkbox"/> Slightly (or Partial)			
Evaporation Rate (vs H2O) <input type="checkbox"/> Faster <input type="checkbox"/> Slower <input checked="" type="checkbox"/> About the Same			
Flash Point (T.C.C.): 214 °F	Odor Threshold: Not available	Melting point/frozen point: Not available	Partition Coefficient: n-octanol/water: Not available
Auto-Ignition Temperature: Not available	Decomposition Temperature: Not available	Viscosity: Not available	

SECTION 10 - STABILITY AND REACTIVITY

Stability: Stable	Incompatibility: Strong oxidizers
Hazardous Decomposition Products: Carbon monoxide and unidentified organic gases may occur during incomplete combustion.	

SECTION 11 - TOXICOLOGICAL INFORMATION

Acute Toxicity: Not Available					Skin Sensitization: Not a sensitizer			
Skin Irritation: Causes skin irritation					Mutagenicity: Not a mutagen			
Eye Irritation: Causes eye irritation					Reproductive Toxicity: None			
Carcinogen/Suspect Carcinogen Ingredients:	<input type="checkbox"/>	NTP	<input type="checkbox"/>	OSHA	<input type="checkbox"/>	ARC	<input checked="" type="checkbox"/>	NONE

SECTION 12 - ECOLOGICAL INFORMATION

Ecotoxicity: Toxic to aquatic life. Harmful to aquatic life with long lasting effects.

SECTION 13 - DISPOSAL CONSIDERATIONS

Waste Disposal Methods: Disposal as is a hazardous waste due to corrosivity . 40CFR261.22

SECTION 14 - TRANSPORT INFORMATION

Not regulated by USDOT.

SECTION 15 - REGULATORY INFORMATION

All ingredients in this product are listed on the TSCA Inventory.

SARA 302 Health Hazard: Acute

SARA 313 Chemicals: None

SECTION 16 - OTHER INFORMATION

DATE PREPARED: 9/4/2018

HMIS HAZARD RATINGS:

HEALTH	1
FLAMMABILITY	0
REACTIVITY	0
PERSONAL PROTECTION EQUIPMENT	B



AJAX CLEANER POWDER-OXYGEN BLEACH

This industrial Safety Data Sheet is not intended for consumers and does not address consumer use of the product. For information regarding consumer applications of this product, refer to the product label.

Version 1.1

SDS Number: 660000000222

Revision Date: 05/14/2015

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : AJAX CLEANER POWDER-OXYGEN BLEACH

Product code : 200000017621

: B01809190000

Manufacturer or supplier's details

Company : Colgate-Palmolive Co
Commerical Consumer Group
191 East Hanover Avenue
Morristown, NJ 07960-3151

Telephone : US: Consumer Affairs - 1-800-468-6502

Emergency telephone number : For emergencies involving spill, leak, fire, exposure or accident call CHEMTREC (24hr) at (800) 424-9300 or (703) 527-3887.

Medical Emergency (24HR): For MEDICAL EMERGENCIES involving this product call: (888) 489-3861

Recommended use of the chemical and restrictions on use

Recommended use : A formulated multi-purpose cleaner

SECTION 2. HAZARDS IDENTIFICATION

Emergency Overview

Appearance	powder
Colour	off-white

GHS Classification

Acute toxicity (Inhalation) : Category 4

GHS Label element

Hazard pictograms :



Signal word : Warning

Hazard statements : H332 Harmful if inhaled.



AJAX CLEANER POWDER-OXYGEN BLEACH

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Version 1.1

SDS Number: 66000000222

Revision Date: 05/14/2015

Precautionary statements : **Prevention:**
P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
P271 Use only outdoors or in a well-ventilated area.
Response:
P304 + P340 + P312 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/ physician if you feel unwell.

Potential Health Effects

Inhalation : May be harmful if inhaled.
Skin : May cause skin irritation upon prolonged contact.
Eyes : Causes eye irritation on direct contact.
Ingestion : May be harmful if swallowed in large quantities.
Aggravated Medical Condition : None known.

Carcinogenicity:

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.

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

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.

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.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous components

Chemical Name	CAS-No.	Concentration (%)
LIMESTONE	1317-65-3	>= 90 - <= 100
SODIUM CARBONATE	497-19-8	>= 5 - < 10

SECTION 4. FIRST AID MEASURES

If inhaled : Remove victim to fresh air. Get medical attention, if symptoms persist.



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- In case of skin contact : Flush skin with large amounts of water. If irritation develops and persists, get medical attention.
- In case of eye contact : Flush eyes with water at least 15 minutes. Get medical attention if eye irritation develops or persists.
- If swallowed : Drink 8 ounces of clear water. Get medical attention.
- Most important symptoms and effects, both acute and delayed : Harmful if inhaled.

SECTION 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
- Hazardous combustion products : No hazardous combustion products are known
- Special protective equipment for firefighters : Self-contained breathing apparatus and full protective clothing should be worn when fighting chemical fires.

SECTION 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : Use personal protection recommended in Section 8 of the SDS.
- Methods and materials for containment and cleaning up : Cover with inert, absorbent material and remove to disposal container. Spill area may be slippery. Flush with plenty of water.

SECTION 7. HANDLING AND STORAGE

- Conditions for safe storage : Store at controlled room temperature at 20-25°C (68-77°F).

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
LIMESTONE	1317-65-3	TWA (Respirable)	5 mg/m3	NIOSH REL
		TWA (total)	10 mg/m3	NIOSH REL
		TWA (Respirable)	5 mg/m3	NIOSH REL



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		TWA (total)	10 mg/m3	NIOSH REL
		TWA (total dust)	15 mg/m3	OSHA Z-1
		TWA (respirable fraction)	5 mg/m3	OSHA Z-1
		TWA (Total dust)	15 mg/m3	OSHA P0
		TWA (respirable dust fraction)	5 mg/m3	OSHA P0

Engineering measures : In an industrial work environment, no special precautions or control measures are required.

Personal protective equipment

Respiratory protection : General and local exhaust ventilation is recommended to maintain vapor exposures below recommended limits. Where concentrations are above recommended limits or are unknown, appropriate respiratory protection should be worn. Follow OSHA respirator regulations (29 CFR 1910.134) and use NIOSH/MSHA approved respirators. Protection provided by air purifying respirators against exposure to any hazardous chemical is limited. Use a positive pressure air supplied respirator if there is any potential for uncontrolled release, exposure levels are unknown, or any other circumstance where air purifying respirators may not provide adequate protection.

Protective measures : In an industrial work environment, if a splash is likely, chemical goggles may be needed. Prolonged skin contact may require protective gloves. For consumer use, no unusual precautions are necessary.

Hygiene measures : In an industrial work environment, avoid eye and prolonged skin contact.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : powder

Colour : off-white

pH : 10.4

Flash point : No data available

Density : 1.04 g/cm3

SECTION 10. STABILITY AND REACTIVITY



AJAX CLEANER POWDER-OXYGEN BLEACH

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Version 1.1

SDS Number: 660000000222

Revision Date: 05/14/2015

- Possibility of hazardous reactions : Hazardous polymerisation does not occur.
- Incompatible materials : Strong oxidizing agents
- Hazardous decomposition products : None known.

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity

Harmful if inhaled.

Product:

Acute oral toxicity : Acute toxicity estimate : > 5,000 mg/kg
Method: Calculation method

Acute inhalation toxicity : Acute toxicity estimate : 1.63 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Method: Calculation method

Components:

LIMESTONE:

Acute oral toxicity : LD50 (Rat): > 2,000 mg/kg
Method: OECD Test Guideline 420

Acute inhalation toxicity : LC50 (Rabbit): > 3 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Method: OECD Test Guideline 403

Acute dermal toxicity : LD50 (Rat): > 2,000 mg/kg
Method: OECD Test Guideline 402

SODIUM CARBONATE:

Acute oral toxicity : LD50 (Rat): 2,800 mg/kg

Acute inhalation toxicity : LC50 (Rabbit): 2.3 mg/l
Exposure time: 2 h
Test atmosphere: No information available.
Method: No information available.

Acute dermal toxicity : LD50 (Rabbit): > 2,000 mg/kg
Method: No information available.

Skin corrosion/irritation

Not classified based on available information.

Components:

LIMESTONE:

AJAX CLEANER POWDER-OXYGEN BLEACH

This industrial Safety Data Sheet is not intended for consumers and does not address consumer use of the product. For information regarding consumer applications of this product, refer to the product label.

Version 1.1

SDS Number: 660000000222

Revision Date: 05/14/2015

Result: No skin irritation

SODIUM CARBONATE:

Remarks: No data available

Serious eye damage/eye irritation

Not classified based on available information.

Components:

LIMESTONE:

Result: No eye irritation

SODIUM CARBONATE:

Result: Irritation to eyes, reversing within 21 days

Respiratory or skin sensitisation

Skin sensitisation: Not classified based on available information.

Respiratory sensitisation: Not classified based on available information.

Components:

LIMESTONE:

Exposure routes: Inhalation

Result: Does not cause respiratory sensitisation.

Exposure routes: Dermal

Result: Does not cause skin sensitisation.

SODIUM CARBONATE:

Exposure routes: Inhalation

Remarks: No data available

Exposure routes: Dermal

Remarks: No data available

Germ cell mutagenicity

Not classified based on available information.

Carcinogenicity

Not classified based on available information.

Reproductive toxicity

Not classified based on available information.

STOT - single exposure

Not classified based on available information.

STOT - repeated exposure

Not classified based on available information.

Aspiration toxicity

Not classified based on available information.



AJAX CLEANER POWDER-OXYGEN BLEACH

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Version 1.1

SDS Number: 660000000222

Revision Date: 05/14/2015

Further information

Product:

Remarks: This product has not been tested as a whole. However, this formula was reviewed by expert toxicologists in the Product Safety Assurance Department of Colgate-Palmolive and is determined to be safe for its intended use. This review has taken into consideration available safety-related information including information on individual ingredients, similar formulas and potential ingredient interactions. This review is a component of the hazard determination used to prepare the statements in Section 3 of the SDS.

SECTION 12. ECOLOGICAL INFORMATION

The product has not been tested as a whole for environmental toxicity. However, environmental information on the ingredients in this product have been reviewed by the Environmental, Health and Safety group of Colgate-Palmolive and determined to have an acceptable environmental profile. This evaluation is based on available information on individual ingredients, interactions of ingredients, and similar ingredients. Biodegradability claims are supported by data on ingredients (i.e., surfactants are biodegradable) or testing conducted on the final product (i.e., This product is biodegradable).

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues : Any disposal practice must be in compliance with local, state and federal laws and regulations (contact local or state environment agency for specific rules). Do not dump in sewers, any body of water or on the ground.

SECTION 14. TRANSPORT INFORMATION

DOT : Not regulated.

TDG : Not regulated.

IATA : Not regulated.

IMDG : Not regulated.

International Regulation

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

National Regulations

SECTION 15. REGULATORY INFORMATION



AJAX CLEANER POWDER-OXYGEN BLEACH

This industrial Safety Data Sheet is not intended for consumers and does not address consumer use of the product. For information regarding consumer applications of this product, refer to the product label.

Version 1.1

SDS Number: 660000000222

Revision Date: 05/14/2015

OSHA Hazards : Combustible dust, Moderate skin irritant, Severe eye irritant

EPCRA - Emergency Planning and Community Right-to-Know Act

CERCLA Reportable Quantity

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
SODIUM DODECYL BENZENE SULFONATE	25155-30-0	1000	*

*: Calculated RQ exceeds reasonably attainable upper limit.

SARA 304 Extremely Hazardous Substances Reportable Quantity

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
SULFUR DIOXIDE	7446-09-5	500	*

*: Calculated RQ exceeds reasonably attainable upper limit.

SARA 311/312 Hazards : Acute Health Hazard

SARA 302 : No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

Clean Air Act

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 12 (40 CFR 61).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCMi Intermediate or Final VOC's (40 CFR 60.489).

Clean Water Act

The following Hazardous Substances are listed under the U.S. CleanWater Act, Section 311, Table 116.4A:

SODIUM DODECYL BENZENE SULFONATE	25155-30-0
Sulfuric Acid	SULFURIC ACID

The following Hazardous Chemicals are listed under the U.S. CleanWater Act, Section 311, Table 117.3:

SODIUM DODECYL BENZENE SULFONATE	25155-30-0
Sulfuric Acid	SULFURIC ACID

This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307

Massachusetts Right To Know



AJAX CLEANER POWDER-OXYGEN BLEACH

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Version 1.1

SDS Number: 660000000222

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LIMESTONE	1317-65-3
SODIUM DODECYL BENZENE SULFONATE	25155-30-0
Sulfuric Acid	SULFURIC ACID
SULFUR DIOXIDE	7446-09-5

Pennsylvania Right To Know

LIMESTONE	1317-65-3
SODIUM CARBONATE	497-19-8
SODIUM DODECYL BENZENE SULFONATE	25155-30-0
Sulfuric Acid	SULFURIC ACID
SULFUR DIOXIDE	7446-09-5
SODIUM SULFATE	7757-82-6

New Jersey Right To Know

LIMESTONE	1317-65-3
SODIUM CARBONATE	497-19-8
SODIUM DODECYL BENZENE SULFONATE	25155-30-0

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

The components of this product are reported in the following inventories:

TSCA : All ingredients in this product are listed on the TSCA Inventory or are not required to be listed on the TSCA Inventory.

Inventories

AICS (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECI (Korea), NZIoC (New Zealand), PICCS (Philippines), TSCA (USA)



AJAX CLEANER POWDER-OXYGEN BLEACH

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Version 1.1

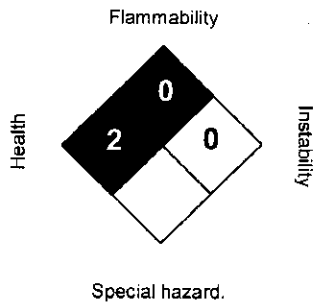
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SECTION 16. OTHER INFORMATION

Further information

NFPA:



HMIS III:

HEALTH	2
FLAMMABILITY	0
PHYSICAL HAZARD	0

0 = not significant, 1 = Slight,
2 = Moderate, 3 = High
4 = Extreme, * = Chronic

Disclaimer: The information on this sheet is limited to the material identified and is believed by the Colgate-Palmolive Company to be correct based on its knowledge and information as of the date noted. Colgate makes no representation, guarantee or warranty, expressed or implied, as to the accuracy, reliability or completeness of the information and assumes no responsibility for injury, damage or loss resulting from the use of the material.

**AJAX TRADITIONAL DISHWASHING HAND LIQUID LEMON -
DERMASSAGE TRADITIONAL DISHWASHING HAND LIQUID**

This industrial Safety Data Sheet is not intended for consumers and does not address consumer use of the product. For information regarding consumer applications of this product, refer to the product label.

Version 1.1

SDS Number: 660000002335

Revision Date: 2016/02/25

SECTION 1. IDENTIFICATION

Product name : AJAX TRADITIONAL DISHWASHING HAND LIQUID
LEMON - DERMASSAGE TRADITIONAL DISHWASHING
HAND LIQUID

Product code : 200000049951
Material : B02902620025

Manufacturer or supplier's details

Company : Colgate-Palmolive Co
300 Park Avenue
New York, NY 10022

Telephone : US: Consumer Affairs - 1-800-468-6502

Emergency telephone number : For emergencies involving spill, leak, fire, exposure or accident call CHEMTREC (24hr) at (800) 424-9300 or (703) 527-3887.

Global-CHEMTREC- +1 703-741-5970

Medical Emergency (24HR): For MEDICAL EMERGENCIES involving this product call: (888) 489-3861

Recommended use of the chemical and restrictions on use

Recommended use : A formulated dishwashing liquid

SECTION 2. HAZARDS IDENTIFICATION**GHS Classification**

Not a hazardous substance or mixture.

GHS Label element

Not a hazardous substance or mixture.

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**Hazardous components**

Chemical Name	CAS-No.	Concentration (% w/w)
LAURAMIDOPROPYLDIMETHYLAMINE OXIDE	61792-31-2	>= 1 - < 5
SODIUM CHLORIDE	7647-14-5	>= 1 - < 5



AJAX TRADITIONAL DISHWASHING HAND LIQUID LEMON - DERMASSAGE TRADITIONAL DISHWASHING HAND LIQUID

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Version 1.1

SDS Number: 660000002335

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SECTION 4. FIRST AID MEASURES

- General advice : No hazards which require special first aid measures.
- If inhaled : Move to fresh air in case of accidental inhalation of dust or fumes from overheating or combustion.
If symptoms persist, call a physician.
- In case of skin contact : Take off contaminated clothing and shoes immediately.
Wash off with soap and plenty of water.
- In case of eye contact : Flush eyes with water as a precaution.
Remove contact lenses.
Protect unharmed eye.
Keep eye wide open while rinsing.
- If swallowed : Clean mouth with water and drink afterwards plenty of water.
Do not give milk or alcoholic beverages.
Never give anything by mouth to an unconscious person.
- Most important symptoms and effects, both acute and delayed : None known.
-

SECTION 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
- Hazardous combustion products : No hazardous combustion products are known
- Further information : Standard procedure for chemical fires.
- Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.
-

SECTION 6. ACCIDENTAL RELEASE MEASURES

- Environmental precautions : No special environmental precautions required.
- Methods and materials for containment and cleaning up : Wipe up with absorbent material (e.g. cloth, fleece).
Keep in suitable, closed containers for disposal.
-

SECTION 7. HANDLING AND STORAGE

- Advice on protection against : Normal measures for preventive fire protection.
-



**AJAX TRADITIONAL DISHWASHING HAND LIQUID LEMON -
 DERMASSAGE TRADITIONAL DISHWASHING HAND LIQUID**

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Version 1.1

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fire and explosion

Advice on safe handling : For personal protection see section 8.
 No special handling advice required.

Conditions for safe storage : Keep container tightly closed in a dry and well-ventilated place.

Materials to avoid : No special restrictions on storage with other products.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Contains no substances with occupational exposure limit values.

Hazardous components without workplace control parameters

Components	CAS-No.
LAURAMIDOPROPYLDIMET	61792-31-2
HYLAMINE OXIDE	
SODIUM CHLORIDE	7647-14-5

Personal protective equipment

Respiratory protection : No personal respiratory protective equipment normally required.

Hand protection

Remarks : For prolonged or repeated contact use protective gloves.

Eye protection : Safety glasses

Skin and body protection : Protective suit

Hygiene measures : General industrial hygiene practice.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : liquid

Colour : yellow

pH : 7.2

Flash point : > 200 °F

Density : >= 1.00 g/cm3

AJAX TRADITIONAL DISHWASHING HAND LIQUID LEMON - DERMASSAGE TRADITIONAL DISHWASHING HAND LIQUID

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Version 1.1

SDS Number: 660000002335

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SECTION 10. STABILITY AND REACTIVITY

Reactivity	: Stable under recommended storage conditions.
Chemical stability	: No decomposition if stored and applied as directed.
Possibility of hazardous reactions	: No hazards to be specially mentioned.
Conditions to avoid	: No data available

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity

Not classified based on available information.

Product:

Acute oral toxicity	: Acute toxicity estimate: > 5,000 mg/kg Method: Calculation method
Acute dermal toxicity	: Acute toxicity estimate: > 5,000 mg/kg Method: Calculation method

Components:

LAURAMIDOPROPYLDIMETHYLAMINE OXIDE:

Acute oral toxicity	: LC50 (Rat): 500 - 1,000 mg/kg Method: OECD Test Guideline 423
Acute inhalation toxicity	: Remarks: No data available
Acute dermal toxicity	: LC50 (Rat): > 2,000 mg/kg Method: OECD Test Guideline 402

SODIUM CHLORIDE:

Acute oral toxicity	: LD50 (Rat): 3,550 mg/kg
Acute inhalation toxicity	: LC50 (Rabbit): > 42,000 mg/l Exposure time: 1 h Test atmosphere: No information available. Method: No information available.
Acute dermal toxicity	: LD50 (Rabbit): > 10,000 mg/kg Method: No information available.

Skin corrosion/irritation

Not classified based on available information.

Product:

AJAX TRADITIONAL DISHWASHING HAND LIQUID LEMON - DERMASSAGE TRADITIONAL DISHWASHING HAND LIQUID

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Version 1.1

SDS Number: 660000002335

Revision Date: 2016/02/25

Remarks: According to the classification criteria of the European Union, the product is not considered as being a skin irritant.

Components:

LAURAMIDOPROPYLDIMETHYLAMINE OXIDE:

Species: Rabbit

Exposure time: 4 h

Method: OECD Test Guideline 404

Result: Mild skin irritation

SODIUM CHLORIDE:

Result: No skin irritation

Serious eye damage/eye irritation

Not classified based on available information.

Product:

Remarks: According to the classification criteria of the European Union, the product is not considered as being an eye irritant.

Components:

LAURAMIDOPROPYLDIMETHYLAMINE OXIDE:

Species: Rabbit

Result: Irritation to eyes, reversing within 21 days

Exposure time: 1 h

Method: OECD Test Guideline 405

SODIUM CHLORIDE:

Result: Mild eye irritation

Respiratory or skin sensitisation

Skin sensitisation: Not classified based on available information.

Respiratory sensitisation: Not classified based on available information.

Product:

Remarks: No data available

Components:

LAURAMIDOPROPYLDIMETHYLAMINE OXIDE:

Exposure routes: Inhalation

Remarks: No data available

Exposure routes: Dermal

Species: Guinea pig

Method: OECD Test Guideline 406

Result: Does not cause skin sensitisation.

SODIUM CHLORIDE:



AJAX TRADITIONAL DISHWASHING HAND LIQUID LEMON - DERMASSAGE TRADITIONAL DISHWASHING HAND LIQUID

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Version 1.1

SDS Number: 660000002335

Revision Date: 2016/02/25

Exposure routes: Inhalation
Remarks: No data available

Exposure routes: Dermal
Result: Does not cause skin sensitisation.

Germ cell mutagenicity

Not classified based on available information.

Carcinogenicity

Not classified based on available information.

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.

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.

Reproductive toxicity

Not classified based on available information.

STOT - single exposure

Not classified based on available information.

STOT - repeated exposure

Not classified based on available information.

Aspiration toxicity

Not classified based on available information.

Further information

Product:

Remarks: This product has not been tested as a whole. However, this formula was reviewed by expert toxicologists in the Product Safety Assurance Department of Colgate-Palmolive and is determined to be safe for its intended use. This review has taken into consideration available safety-related information including information on individual ingredients, similar formulas and potential ingredient interactions. This review is a component of the hazard determination used to prepare the statements in Section 3 of the SDS.

SECTION 12. ECOLOGICAL INFORMATION

The product has not been tested as a whole for environmental toxicity. However, environmental information on the ingredients in this product have been reviewed by the Environmental, Health and Safety group of Colgate-Palmolive and determined to have an acceptable environmental profile. This evalua-



**AJAX TRADITIONAL DISHWASHING HAND LIQUID LEMON -
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Version 1.1

SDS Number: 660000002335

Revision Date: 2016/02/25

tion is based on available information on individual ingredients, interactions of ingredients, and similar ingredients. Biodegradability claims are supported by data on ingredients (i.e., surfactants are biodegradable) or testing conducted on the final product (i.e., This product is biodegradable).

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues : Offer surplus and non-recyclable solutions to a licensed disposal company.

Contaminated packaging : Empty remaining contents.
Empty containers should be taken to an approved waste handling site for recycling or disposal.

SECTION 14. TRANSPORT INFORMATION

DOT : Not regulated.

TDG : Not regulated.

IATA : Not regulated.

IMDG : Not regulated.

ADR : NOT REGULATED.

International Regulation

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

National Regulations

SECTION 15. REGULATORY INFORMATION

EPCRA - Emergency Planning and Community Right-to-Know Act

CERCLA Reportable Quantity

Components	CAS-No.	Component RQ (lbs)	Component RQ (lbs)
Sulfuric Acid	7664-93-9	1000	*
Sulfuric Acid	7664-93-9	100	*

*: Calculated RQ exceeds reasonably attainable upper limit.

AJAX TRADITIONAL DISHWASHING HAND LIQUID LEMON - DERMASSAGE TRADITIONAL DISHWASHING HAND LIQUID

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Version 1.1

SDS Number: 660000002335

Revision Date: 2016/02/25

SARA 304 Extremely Hazardous Substances Reportable Quantity

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
Sulfuric Acid	7664-93-9	1000	*

*: Calculated RQ exceeds reasonably attainable upper limit.

SARA 302 : No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

Clean Air Act

This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 12 (40 CFR 61).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCM Intermediate or Final VOC's (40 CFR 60.489).

Clean Water Act

The following Hazardous Substances are listed under the U.S. CleanWater Act, Section 311, Table 116.4A:

Sulfuric Acid	SULFURIC ACID
SODIUM HYDROXIDE	1310-73-2

The following Hazardous Chemicals are listed under the U.S. CleanWater Act, Section 311, Table 117.3:

Sulfuric Acid	SULFURIC ACID
SODIUM HYDROXIDE	1310-73-2

This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307

US State Regulations

Massachusetts Right To Know

Sulfuric Acid	SULFURIC ACID	0 - 0.1 %
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Pennsylvania Right To Know

Water	WATER	70 - 90 %
C12-C15 0.6EO Ammonium Sulfate	Not Assigned	5 - 10 %
AMMONIUM SULFATE	7783-20-2	0 - 0.1 %

New Jersey Right To Know

Water	WATER	70 - 90 %
C12-C15 0.6EO Ammonium Sulfate	Not Assigned	5 - 10 %
LAURAMIDOPROPYLDIMETHYLAMINE OXIDE	61792-31-2	1 - 5 %

**AJAX TRADITIONAL DISHWASHING HAND LIQUID LEMON -
DERMASSAGE TRADITIONAL DISHWASHING HAND LIQUID**

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Version 1.1

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SODIUM CHLORIDE

7647-14-5

1 - 5 %

SECTION 16. OTHER INFORMATION**Full text of other abbreviations**

(Q)SAR - (Quantitative) Structure Activity Relationship; ASTM - American Society for the Testing of Materials; bw - Body weight; DIN - Standard of the German Institute for Standardisation; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISO - International Organisation for Standardization; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative; DSL - Domestic Substances List (Canada); KECI - Korea Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); AICS - Australian Inventory of Chemical Substances; IECSC - Inventory of Existing Chemical Substances in China; ENCS - Existing and New Chemical Substances (Japan); ISHL - Industrial Safety and Health Law (Japan); PICCS - Philippines Inventory of Chemicals and Chemical Substances; NZIoC - New Zealand Inventory of Chemicals; TCSI - Taiwan Chemical Substance Inventory; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; DOT - Department of Transportation; EHS - Extremely Hazardous Substance; HMIS - Hazardous Materials Identification System; MSHA - Mine Safety and Health Administration; NFPA - National Fire Protection Association; RCRA - Resource Conservation and Recovery Act; RQ - Reportable Quantity; SARA - Superfund Amendments and Reauthorization Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; GLP - Good Laboratory Practice; ERG - Emergency Response Guide; NTP - National Toxicology Program; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods



**AJAX TRADITIONAL DISHWASHING HAND LIQUID LEMON -
 DERMASSAGE TRADITIONAL DISHWASHING HAND LIQUID**

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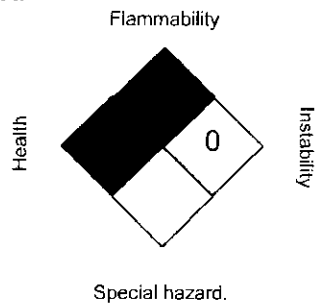
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Further information

NFPA:



HMIS III:

HEALTH	0
	1
PHYSICAL HAZARD	0

0 = not significant, 1 =Slight,
 2 = Moderate, 3 = High
 4 = Extreme, * = Chronic

Revision Date : 2016/02/25

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

US / EN



Safety Data Sheet

Albumin (Egg)

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: Albumin (Egg)

Synonyms/Generic Names: None

SDS Number: 16.00

Product Use: For Educational Use Only

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

For More Information Contact: Ward's Science
5100 West Henrietta Rd.
PO Box 92912-9012
Rochester, NY 14692
(800) 962-2660 (Monday-Friday 7:30-7:00 Eastern Time)

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

2. HAZARDS IDENTIFICATION

OSHA Hazards: No known OSHA hazards

Target Organs: None

Signal Words: None

Pictograms: None

GHS Classification:

Not a dangerous substance according to GHS	
--	--

GHS Label Elements, including precautionary statements:

Hazard Statements:

None	
------	--

Precautionary Statements:

None	
------	--

Potential Health Effects

Eyes	May cause eye irritation.
Inhalation	May be harmful if inhaled. May cause respiratory tract irritation.
Skin	May be harmful if absorbed through skin. May cause skin irritation.
Ingestion	May be harmful if swallowed.

NFPA Ratings

Health	0
Flammability	0
Reactivity	0
Specific hazard	Not Available

HMIS Ratings

Health	0
Fire	0
Reactivity	0
Personal	C

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	Weight %	CAS #	EINECS# / ELINCS#	Formula	Molecular Weight
Albumin, (Egg)	100	9006-59-1	232-692-7	$C_{720}H_{1134}N_{218}S_5O_{248}$ (Estimated)	16,972.30 (Estimated)

4. FIRST-AID MEASURES

Eyes	Flush eyes with water as a precaution.
Inhalation	Move casualty to fresh air and keep at rest. If breathing is difficult, give oxygen. If not breathing, give artificial respiration.
Skin	Wash off with soap and plenty of water.
Ingestion	Do Not Induce Vomiting! Never give anything by mouth to an unconscious person. If conscious, wash out mouth with water.

5. FIRE-FIGHTING MEASURES

Suitable (and unsuitable) extinguishing media	Use water spray, alcohol-resistant foam, dry chemical, or carbon dioxide.
Special protective equipment and precautions for firefighters	Wear self-contained, approved breathing apparatus and full protective clothing, including eye protection and boots.
Specific hazards arising from the chemical	Emits toxic fumes under fire conditions. (Carbon oxides, Nitrogen oxides, Sulfur oxides) (See also Stability and Reactivity section).

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	See section 8 for recommendations on the use of personal protective equipment.
Environmental precautions	Prevent spillage from entering drains. Any release to the environment may be subject to federal/national or local reporting requirements.
Methods and materials for containment and cleaning up	Prevent spillage from entering drains. Pick up and arrange disposal without creating dust. Sweep up and 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.

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: Contains no substances with occupational exposure limit values.

Personal Protection

Eyes	Wear chemical safety glasses or goggles.
Inhalation	Provide local exhaust, preferably mechanical. If exposure levels are excessive, use an approved respirator.
Skin	Wear nitrile or rubber gloves, apron or lab coat.
Other	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.)	Pale yellow powder
Odor	Not Available
Odor threshold	Not Available
pH	Not Available
Melting point/freezing point	Not Available
Initial boiling point and boiling range	Not Available
Flash point	Not Flammable
Evaporation rate	Not Available
Flammability (solid, gas)	Not Flammable
Upper/lower flammability or explosive limit	Not Flammable
Vapor pressure	Not Available
Vapor density	Not Available
Relative density	Not Available
Solubility (ies)	Insoluble
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	Heat and moisture.
Incompatible Materials	Strong oxidizing agents.
Hazardous Decomposition Products	Carbon oxides, Nitrogen oxides, Sulfur oxides.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Skin	Not Available
Eyes	Not Available
Respiratory	Not Available
Ingestion	LD50 Oral – mouse - >24,000 mg/kg

Carcinogenicity

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

Skin	Redness, itching.
Eyes	Redness, tearing, itching, burning, conjunctivitis.
Respiratory	Irritation of mucous
Ingestion	Irritation and burning sensations of the mouth and throat, nausea, vomiting, and abdominal pain.

Chronic Toxicity	Causes damage to lungs
Teratogenicity	Not Available
Mutagenicity	Not Available
Embryotoxicity	Not Available
Specific Target Organ Toxicity	Not Available

12. ECOLOGICAL INFORMATION

Ecotoxicity

Aquatic Vertebrate	Not Available
Aquatic Invertebrate	Not Available
Terrestrial	Not Available

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

13. DISPOSAL CONSIDERATIONS

Waste Residues	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 products or residues.
Product Containers	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

US DOT	Not Dangerous Goods
TDG	Not Dangerous Goods
IMDG	Not Dangerous Goods
Marine Pollutant	No
IATA/ICAO	Not Dangerous Goods

15. REGULATORY INFORMATION

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	No SARA Hazards
SARA 312	No SARA Hazards
SARA 313	Not Listed
WHMIS Canada	Not Listed

16. OTHER INFORMATION

Revision	Date
Revision 1	01/28/2013

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.

Alcohol Prep Pads

Safety Data Sheet

according to Regulation (EC) No. 453/2010

Date of issue: 14/04/2014

Revision date:

Version: 1.0

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form : Mixture
Trade name : Alcohol prep pads 6.5 x 3 cm
Product group : Trade product

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

1.2.1. Relevant identified uses

Use of the substance/mixture : Antiseptic Cleanser

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Manufacturer:

Henry Schein Inc.
135 Duryea Road
Melville, NY 11747 USA

Supplier:

Henry Schein UK Holdings Ltd.
Medcare House, Centurion Close
Gillingham Business Park
Gillingham, ME8 0SB U.K.
Telefon +44 (0) 1892 87050; Fax +44 (0) 1634 87 87 51
E-mail: cbdeurope@henryschein.de

1.4. Emergency telephone number

Emergency number : Chemtrec US (800) 424-9300 - International: 001 703-527-3887

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Flam. Liq. 2 H225

Eye Irrit. 2 H319

STOT SE 3 H336

Full text of H-phrases: see section 16

Classification according to Directive 67/548/EEC or 1999/45/EC

F; R11

Xi; R36

R67

Full text of R-phrases: see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



GHS02



GHS07

Signal word (CLP) : Danger

Hazard statements (CLP) : H225 - Highly flammable liquid and vapour
H319 - Causes serious eye irritation

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Data Sheet

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Precautionary statements (CLP) : H336 - May cause drowsiness or dizziness
P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking
P233 - Keep container tightly closed
P240 - Ground/bond container and receiving equipment
P241 - Use explosion-proof electrical/ventilating/lighting equipment
P261 - Avoid breathing dust/fume/gas/mist/vapours/spray
P264 - Wash hands thoroughly after handling
P280 - Wear Eye / face protection
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P337+P313 - If eye irritation persists: get medical advice/attention

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

Name	Product identifier	%	Classification according to Directive 67/548/EEC
Isopropyl alcohol	(CAS No) 67-63-0 (EC no) 200-661-7 (EC index no) 603-117-00-0	68 - 72	F; R11 Xi; R36 R67

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Isopropyl alcohol	(CAS No) 67-63-0 (EC no) 200-661-7 (EC index no) 603-117-00-0	68 - 72	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336

Full text of R- and H-phrases: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
First-aid measures after inhalation : Remove to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER/doctor/physician if you feel unwell.
First-aid measures after skin contact : If rash or irritation develops, discontinue use. Rinse skin with water/shower. Remove/Take off immediately all contaminated clothing.
First-aid measures after eye contact : 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.
First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries after inhalation : May cause drowsiness or dizziness.
Symptoms/injuries after eye contact : Causes serious eye irritation.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray. Sand.
Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Highly flammable liquid and vapour.
Explosion hazard : May form flammable/explosive vapour-air mixture.

5.3. Advice for firefighters

Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.
Protective equipment for firefighters : Do not enter fire area without proper protective equipment, including respiratory protection.

Alcohol Prep Pads Safety

Data Sheet

according to Regulation (EC) No. 453/2010

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Remove ignition sources. Use special care to avoid static electric charges. No naked lights. No smoking.

6.1.1. For non-emergency personnel

Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection. Avoid breathing dust/fume/gas/mist/vapours/spray.

Emergency procedures : Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials. Dispose of contents/container to comply with applicable local, national and international regulations.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed : Handle empty containers with care because residual vapours are flammable.

Precautions for safe handling : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapour. No naked lights. No smoking. Use only non-sparking tools. Avoid breathing gas, fumes, vapour or spray. Use only outdoors or in a well-ventilated area.

Hygiene measures : Wash hands thoroughly after handling.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Proper grounding procedures to avoid static electricity should be followed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment.

Storage conditions : Keep only in the original container in a cool, well ventilated place away from : Keep away from sources of heat (e.g. hot surfaces), sparks and open flames. Keep in fireproof place. Keep container tightly closed.

Incompatible products : Strong bases. Strong acids.

Incompatible materials : Sources of ignition. Direct sunlight. Heat sources.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Isopropyl alcohol (67-63-0)		
Austria	MAK (mg/m ³)	500 mg/m ³ (short time value for large casting)
Austria	MAK (ppm)	200 ppm (short time value for large casting)
Austria	MAK Short time value (mg/m ³)	2000 mg/m ³ (STEL for large casting valid till 12/31/2013)
Austria	MAK Short time value (ppm)	800 ppm (STEL for large casting valid till 12/31/2013)
Belgium	Limit value (mg/m ³)	500 mg/m ³
Belgium	Limit value (ppm)	200 ppm
Belgium	Short time value (mg/m ³)	1000 mg/m ³
Belgium	Short time value (ppm)	400 ppm
Bulgaria	OEL TWA (mg/m ³)	980.0 mg/m ³
Bulgaria	OEL STEL (mg/m ³)	1225.0 mg/m ³
Czech Republic	Expoziční limity (PEL) (mg/m ³)	500 mg/m ³
Denmark	Grænseværdie (langvarig) (mg/m ³)	490 mg/m ³
Denmark	Grænseværdie (langvarig) (ppm)	200 ppm
Estonia	OEL TWA (mg/m ³)	350 mg/m ³
Estonia	OEL TWA (ppm)	150 ppm
Estonia	OEL STEL (mg/m ³)	600 mg/m ³

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Isopropyl alcohol (67-63-0)		
Estonia	OEL STEL (ppm)	250 ppm
Finland	HTP-arvo (8h) (mg/m ³)	500 mg/m ³
Finland	HTP-arvo (8h) (ppm)	200 ppm
Finland	HTP-arvo (15 min)	620 mg/m ³
Finland	HTP-arvo (15 min) (ppm)	250 ppm
France	VLE (mg/m ³)	980 mg/m ³
France	VLE (ppm)	400 ppm
Germany	TRGS 900 Occupational exposure limit value (mg/m ³)	500 mg/m ³ (The risk of damage to the embryo or fetus can be excluded when AGW and BGW values are observed)
Germany	TRGS 900 Occupational exposure limit value (ppm)	200 ppm (The risk of damage to the embryo or fetus can be excluded when AGW and BGW values are observed)
Germany	TRGS 903 (BGW)	25 mg/l (Medium: whole blood - Time: end of shift - Parameter: Acetone) 25 mg/l (Medium: urine - Time: end of shift - Parameter: Acetone)
Greece	OEL TWA (mg/m ³)	980 mg/m ³
Greece	OEL TWA (ppm)	400 ppm
Greece	OEL STEL (mg/m ³)	1225 mg/m ³
Greece	OEL STEL (ppm)	500 ppm
Hungary	AK-érték	500 mg/m ³
Hungary	CK-érték	2000 mg/m ³
Ireland	OEL (8 hours ref) (ppm)	200 ppm
Ireland	OEL (15 min ref) (ppm)	400 ppm
Latvia	OEL TWA (mg/m ³)	350 mg/m ³
Lithuania	IPRV (mg/m ³)	350 mg/m ³
Lithuania	IPRV (ppm)	150 ppm
Lithuania	TPRV (mg/m ³)	600 mg/m ³
Lithuania	TPRV (ppm)	250 ppm
Poland	NDS (mg/m ³)	900 mg/m ³
Poland	NDSch (mg/m ³)	1200 mg/m ³
Portugal	OEL TWA (ppm)	200 ppm
Portugal	OEL STEL (ppm)	400 ppm
Romania	OEL TWA (mg/m ³)	200 mg/m ³
Romania	OEL TWA (ppm)	81 ppm
Romania	OEL STEL (mg/m ³)	500 mg/m ³
Romania	OEL STEL (ppm)	203 ppm
Slovakia	NPHV (priemerná) (mg/m ³)	500 mg/m ³
Slovakia	NPHV (priemerná) (ppm)	200 ppm
Slovakia	NPHV (Hraničná) (mg/m ³)	1000 mg/m ³
Slovenia	OEL TWA (mg/m ³)	500 mg/m ³
Slovenia	OEL TWA (ppm)	200 ppm
Slovenia	OEL STEL (mg/m ³)	2000 mg/m ³
Slovenia	OEL STEL (ppm)	800 ppm
Spain	VLA-ED (mg/m ³)	500 mg/m ³ (it is prohibited the partial or complete commercialization or use of this substance as a phytosanitary or biocide compound)
Spain	VLA-ED (ppm)	200 ppm (it is prohibited the partial or complete commercialization or use of this substance as a phytosanitary or biocide compound)
Spain	VLA-EC (mg/m ³)	1000 mg/m ³
Spain	VLA-EC (ppm)	400 ppm
Sweden	nivågränsvärde (NVG) (mg/m ³)	350 mg/m ³
Sweden	nivågränsvärde (NVG) (ppm)	150 ppm

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Isopropyl alcohol (67-63-0)		
Sweden	kortidsvärde (KTV) (mg/m ³)	600 mg/m ³
Sweden	kortidsvärde (KTV) (ppm)	250 ppm
United Kingdom	WEL TWA (mg/m ³)	999 mg/m ³
United Kingdom	WEL TWA (ppm)	400 ppm
United Kingdom	WEL STEL (mg/m ³)	1250 mg/m ³
United Kingdom	WEL STEL (ppm)	500 ppm
Norway	Gjennomsnittsverdier (AN) (mg/m ³)	245 mg/m ³
Norway	Gjennomsnittsverdier (AN) (ppm)	100 ppm
Norway	Gjennomsnittsverdier (Kortidsværdi) (mg/m ³)	306.25 mg/m ³
Norway	Gjennomsnittsverdier (Kortidsværdi) (ppm)	150 ppm
Switzerland	VME (mg/m ³)	500 mg/m ³
Switzerland	VME (ppm)	200 ppm
Switzerland	VLE (mg/m ³)	1000 mg/m ³
Switzerland	VLE (ppm)	400 ppm
Australia	TWA (mg/m ³)	983 mg/m ³
Australia	TWA (ppm)	400
Australia	STEL (mg/m ³)	1230 mg/m ³
Australia	STEL (ppm)	500 ppm
Canada (Quebec)	VECD (mg/m ³)	1230 mg/m ³
Canada (Quebec)	VECD (ppm)	500 ppm
Canada (Quebec)	VEMP (mg/m ³)	985 mg/m ³
Canada (Quebec)	VEMP (ppm)	400 ppm
USA - ACGIH	ACGIH TWA (ppm)	200 ppm
USA - ACGIH	ACGIH STEL (ppm)	400 ppm
USA - IDLH	US IDLH (ppm)	2000 ppm (10% LEL)
USA - NIOSH	NIOSH REL (TWA) (mg/m ³)	980 mg/m ³
USA - NIOSH	NIOSH REL (TWA) (ppm)	400 ppm
USA - NIOSH	NIOSH REL (STEL) (mg/m ³)	1225 mg/m ³
USA - NIOSH	NIOSH REL (STEL) (ppm)	500 ppm
USA - OSHA	OSHA PEL (TWA) (mg/m ³)	980 mg/m ³
USA - OSHA	OSHA PEL (TWA) (ppm)	400 ppm

8.2. Exposure controls

Personal protective equipment

: Avoid all unnecessary exposure. In case of splash hazard: safety glasses.



Hand protection

: Wear protective gloves.

Eye protection

: Chemical goggles or safety glasses.

Respiratory protection

: Where exposure through inhalation may occur from use, respiratory protection equipment is recommended.

Other information

: Do not eat, drink or smoke during use. Handle in accordance with good industrial hygiene and safety procedures.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: White non woven cloth saturated with alcohol solution.
Colour	: Colourless.
odour	: Mild alcohol odour.
Odour threshold	: No data available
pH	: No data available
Relative evaporation rate (butyl acetate=1)	: No data available
Melting point	: -31.5 °C

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Freezing point	: No data available
Boiling point	: 80.2 °C
Flash point	: 68.5 °F Total organic carbon (TOC)
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: Highly flammable liquid and vapour
Vapour pressure	: 33 mm Hg (at 20 °C)
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Density	: 0.8405 Specific Gravity
Relative gas density	: 2.1
Solubility	: Not applicable.
Log Pow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under normal conditions of use.

10.2. Chemical stability

Stable at ambient temperature and under normal conditions of use. Highly flammable liquid and vapour. May form flammable/explosive vapour-air mixture.

10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures. Open flame.

10.5. Incompatible materials

Strong acids. Strong bases.

10.6. Hazardous decomposition products

Fume. Carbon monoxide. Carbon dioxide. May release flammable gases.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

Isopropyl alcohol (67-63-0)	
LD50 oral rat	4396 mg/kg
LD50 dermal rabbit	12800 mg/kg
LC50 inhalation rat (ppm)	16000 ppm (Exposure time: 8 h)
ATE CLP (oral)	4396.000 mg/kg bodyweight
ATE CLP (dermal)	12800.000 mg/kg bodyweight

Skin corrosion/irritation	: Not classified Based on available data, the classification criteria are not met
Serious eye damage/irritation	: Causes serious eye irritation.
Respiratory or skin sensitisation	: Not classified Based on available data, the classification criteria are not met
Germ cell mutagenicity	: Not classified Based on available data, the classification criteria are not met
Carcinogenicity	: Not classified Based on available data, the classification criteria are not met
Reproductive toxicity	: Not classified Based on available data, the classification criteria are not met

Alcohol Prep Pads

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according to Regulation (EC) No. 453/2010

Specific target organ toxicity (single exposure)	: May cause drowsiness or dizziness.
Specific target organ toxicity (repeated exposure)	: Not classified Based on available data, the classification criteria are not met
Aspiration hazard	: Not classified Based on available data, the classification criteria are not met
Potential Adverse human health effects and symptoms	: Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

12.1. Toxicity

Isopropyl alcohol (67-63-0)	
LC50 fishes 1	9640 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])
EC50 Daphnia 1	13299 mg/l (Exposure time: 48 h - Species: Daphnia magna)
EC50 other aquatic organisms 1	> 1000 mg/l (Exposure time: 96 h - Species: Desmodesmus subspicatus)
LC50 fish 2	11130 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])
EC50 other aquatic organisms 2	> 1000 mg/l (Exposure time: 72 h - Species: Desmodesmus subspicatus)

12.2. Persistence and degradability

Alcohol Prep Pads	
Persistence and degradability	Not established.

12.3. Bioaccumulative potential

Alcohol Prep Pads	
Bioaccumulative potential	Not established.

Isopropyl alcohol (67-63-0)	
Log Pow	0.05 (at 25 °C)

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

: Avoid release to the environment

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste disposal recommendations	: Dispose in a safe manner in accordance with local/national regulations.
Additional information	: Handle empty containers with care because residual vapours are flammable.
Ecology - waste materials	: Avoid release to the environment.

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

14.1. UN number

No dangerous good in sense of transport regulations

14.2. UN proper shipping name

Not applicable

14.3. Transport hazard class(es)

Not applicable

14.4. Packing group

Not applicable

14.5. Environmental hazards

Dangerous for the environment	: No
Marine pollutant	: No
Other information	: No supplementary information available.

Alcohol Prep Pads

Safety Data Sheet

according to Regulation (EC) No. 453/2010

14.6. Special precautions for user

14.6.1. Overland transport

No additional information available

14.6.2. Transport by sea

No additional information available

14.6.3. Air transport

No additional information available

14.6.4. Inland waterway transport

No additional information available

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.1.1. EU-Regulations

No REACH Annex XVII restrictions

Contains no REACH candidate substance

Other information, restriction and prohibition regulations : Compliance with following regulations: Directive 1999/45/EC as amended. Directive 67/548/EEC as amended. Regulation (EC) 1272/2008 as amended. Regulation (EC) 1907/2006 as amended.

Seveso Information : No additional information available

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Sources of Key data : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

Abbreviations and acronyms : ACGIH (American Conference of Government Industrial Hygienists). ATE - acute toxicity estimate. CAS - Chemical Abstracts Service. CLP - Classification, Labelling and Packaging. CSR - Chemical Safety Report. EC - European Community. GHS - Globally Harmonised System. PBT - Persistent, Bioaccumulative and Toxic substance. REACH - Registration, Evaluation, Authorisation and Restriction of Chemicals. SDS - Safety Data Sheet. STEL - Short-Term Exposure Limit. TLV - Threshold Limit Value. TWA - Time Weighted Average. vPvB - Very Persistent and Very Bioaccumulative.

Other information : None.

Full text of R-, H- and EUH-phrases:

Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Flam. Liq. 2	flammable liquids Category 2
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
H225	Highly flammable liquid and vapour
H319	Causes serious eye irritation
H336	May cause drowsiness or dizziness
R11	Highly flammable
R36	Irritating to eyes
R67	Vapours may cause drowsiness and dizziness
F	Highly flammable
Xi	Irritant

SDS EU (REACH Annex II)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product



Corporate Headquarters
10 Glenshaw Street, Orangeburg, NY 10962
Tel: 845.365.8200 • Fax: 845.365.8201
Toll-Free: 888.DYNAREX

Reviewed on 5/9/16

SAFETY DATA SHEET

SECTION 1. Product and Company Identification

PRODUCT NAME: Alcohol Preparation Pads/Swab

RECOMMENDED USE: Topical skin antiseptic

Product Code: AM-20200, 1113, 1114, 1116, PK-1114

Manufacturer's Name: Dynarex Corporation
Manufacturer's Address: 10 Glenshaw Street
Orangeburg, NY 10962
Emergency or Information Phone No.: 888-DYNAREX or 845-365-8200
At other times, contact the local Poison Control Center

SECTION 2. Hazards Identification

<u>Physical hazards</u>	Flammable solids	Category 1
<u>Health hazards</u>	Serious eye damage/eye irritation	Category 2A
<u>Environmental hazards</u>	Not determined.	
<u>OSHA defined hazards</u>	None additional.	

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Corporate Headquarters
10 Glenshaw Street, Orangeburg, NY 10962
Tel: 845.365.8200 • Fax: 845.365.8201
Toll-Free: 888.DYNAREX

Label elements



Signal word

Hazard statement

Danger

Flammable solid

Causes serious eye irritation

Precautionary statement

Prevention

Keep away from heat/sparks/open flames/hot surfaces – No smoking. Use only in a well-ventilated area.

Response

If inhaled: Remove person to fresh air and keep 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/doctor. In case of fire: use appropriate media to extinguish.

Storage

Store in a well-ventilated place.

Disposal

Dispose of waste and residues in accordance with local authority requirements.

Hazard(s) not otherwise
Classified (HNOC)

None known.



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Supplemental information

Main Hazards:

Highly flammable; irritation to eyes; vapor may cause drowsiness and dizziness

Absorption:

Eye contact; ingestion; inhalation; skin contact

Carcinogenic Status:

Not considered carcinogenic by NTP, IARC, and OSHA

Target Organs:

Central nerves system; skin; eye; liver; respiratory system

Health Effects:

Eyes

Liquid, mist or vapor will cause conjunctival irritation and possible corneal damage.

Skin

Repeated or prolonged contact may produce defatting of the skin leading to irritation and dermatitis. Liquid may be absorbed through the skin but not in toxicologically significant amounts, unless the contact area is large and under prolonged exposure.

Ingestion

Swallowing a small amount may have the effect of any of these symptoms: irritation of mouth, throat, digestive tract, and central nerves system depression.

A large dose may have the effect of any of these symptoms: dizziness, drowsiness, headache, mental confusion, nerve damage leading to numbness



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and muscle weakness, fall of blood pressure, liver damage, lung damage.

Inhalation

Exposure to vapor may have the effect of any of these symptoms: irritation of nose, throat and respiratory tract, central nerve system depression.

Exposure to vapor at high concentration may have the effects of any of these symptoms: dizziness, drowsiness, headache, mental confusion, lung damage, fall of blood pressure, liver damage, nerve damage leading to numbness and muscle weakness.

SECTION 3. Composition/information on Ingredients

Hazardous Ingredients (specific)	% Composition	CAS Number
Isopropyl Alcohol (2-Propanol)	70%	67-63-0
Inactive Ingredient		
Water	30%	7732-18-5

SECTION 4. First-aid measures

Eyes:

Immediately flood the eye with plenty of water for at least 15 minutes, holding the eye open. Obtain medical attention if soreness or redness persists.

Skin:

Immediately flood the affected skin area with large quantity of water, preferably under a shower. Remove contaminated clothing and continue washing. Contaminated clothing should be washed thoroughly before re-use. Obtain medical attention if blistering of the skin occurs or redness persists.

Ingestion:

Do not induce vomiting. Have victim drink several large glasses of water to dilute the stomach contents. Give the victim oxygen if he/she has difficulty in





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breathing. Obtain medical attention immediately.

Inhalation:

Remove the victim from exposure immediately. Give the victim oxygen if he/she has difficulty in breathing. Obtain medical attention immediately.

MEDICAL PERSONNEL:

Monitor the victim for systemic secondary effects on liver and kidney functions. Support and treat as appropriate.

SECTION 5. Fire-fighting measures

Flash Point – 20°C/68°F

Boiling Point – 80°C/176°F

Extinguishing Media – Dry Chemical or Alcohol Type Foam, Carbon Dioxide

Be aware of the possibility of re-ignition. Keep containers and surroundings cool with water spray.

Unusual Fire and Explosion Hazards –

Class 3 Flammability. Vapor can travel a considerable distance to a source of ignition and flashback. Flashback can occur if air temperature exceeds flash point. Be aware the possibility of re-ignition.

Special Fire Fighting Procedures –

Handle as Flammable Liquid. Use Respiratory Protection. Wear full protective clothing for Fire Fighting Personnel.

SECTION 6. Accidental release measures

- Flush spills with water.



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- Contain and absorb using soil, sand, or other inert material.
- Vapor can accumulate in low areas. Consider the need for evacuation.
- Prevent the material from entering drains or water courses.

SECTION 7. Handling and storage

- Eliminate all sources of ignition. Store away from heat.
- Store in well ventilated area.
- Handle as flammable liquid. Follow local, state and federal regulations.
- Avoid inhaling vapor. Avoid contact with eyes, skin and clothing.
- Wear eye protection if splashing is expected.
- Wear appropriate protective clothing.
- Use respirator if exposure level is high when handling bulk liquid.
- Keep container tightly closed when not in use.

SECTION 8. Exposure controls/personal protection

- OSHA Occupation Exposure Standards PEL 400ppm (980mg/m³) 8h TWA
- UK EH40: OES 400ppm (980mg/m³) 8h TWA
- UK EH40: OES 500ppm (1225mg/m³) 15min TWA
- ACGIH: TLV 200ppm (980mg/m³) 8h TWA
- ACGIH: STEL 400ppm (1225mg/m³) 15min TWA
- Personal Protective Equipment
 - Gloves
 - Eye
 - Clothing

SECTION 9. Physical and chemical properties

Appearance – Liquid Saturated Towelette / Pad / Swab



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Color – Clear
Odor – Alcohol
Vapor Density – 2.1 (Air = 1)
Viscosity (cSt) – 2.9 cps at <@2> °C

Evaporation Rate – Environmental Dependent
Water Solubility – Complete
Specific Gravity – 0.8405

SECTION 10. Stability and reactivity

Stability –	Stable under normal conditions
Conditions to Avoid –	None
Incompatibility –	None
Hazardous Decomposition or By-product –	Oxides of carbon
Polymerization –	Will Not Occur.

SECTION 11. Toxicological information

Acute Toxicity

- Low level of acute toxicity predicted.
- May be harmful by skin absorption.
- Oral LD50 (rat) 5045mg/kg.
- Dermal LD50 (rabbit) 12800mg/kg.
- Inhalation LCLO (rat) 1600ppm 4h.

Chronic Toxicity / Carcinogenicity

- Material not expected to cause long-term adverse health effects.
- Material not classifiable as to its carcinogenicity to humans (Group 3).
- Chronic / Sub-chronic studies resulted in adverse effects to:



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- Liver, spleen, biochemical effects, brain tissue degeneration, changes in reflex behavior, sensory nerve damage.

Genealogy Toxicity

- Material is not expected to cause any mutagenic effects.

Reproductive / Developmental Toxicity

- Material is not expected to cause reproductive or developmental health effects.
- Experimental studies in animals have provided some evidence of embryo / fetus toxicity and birth defects only at does producing marked maternal toxicity.

SECTION 12. Ecological information

- Mobility
- If released to soil, IPA is expected to have very high mobility
- Persistence / Degradability
- IPA is readily degraded in aerobic aqueous systems
- Bio-accumulation

- Low potential for bio-concentration in aquatic organisms

SECTION 13. Disposal considerations

- Transfer into suitable containers for recovery or disposal.
- Dispose in accordance with all applicable local and national regulations.
- Do not remove labels from container until the container has been cleaned.
- Do not cut, puncture or weld on or near the container.
- Do not incinerate closed containers.
- Empty containers may contain hazardous residues



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SECTION 14. Transport information

US DOT Information:

Shipping Name: Not applicable

Hazard Class: Not applicable

UN/NA #: Not regulated per 49 CFR, Special Provision 47 (for rail and road transport in the USA)

Packing Group: Not applicable

Required Label(s): Not applicable

Additional Information: No additional information available

IATA Information:

Shipping Name: Not applicable

Hazard Class: Not applicable

UN#: Not regulated, as per IATA, Special Provision A46

Packing Group: Not applicable

Required Label(s): Not applicable

Additional information: Consult current IATA regulations prior to shipping by air

IMDG Information:

Shipping Name: Not applicable

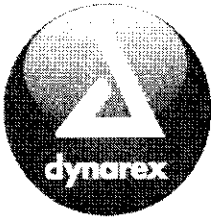
Hazard Class: Not applicable

UN#: Not regulated, as per IMDG Code, Special Provision 216

Packing Group: Not applicable

Required Label(s): Not applicable

Additional information: No additional information available



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TDG Information:

Shipping Name: Not applicable

Hazard Class: Not applicable

UN#: Not regulated

Packing Group: Not applicable

Required Label(s): Not applicable

Additional information: No additional information available

SECTION 15. Regulatory information

This product is compliant with the following:

- EU Label: Classification and labeling have been performed according to EU Directive 67/548/EEC and 99/45/EC including amendments
- EU Hazard Symbol and Indication of Danger
- F – Highly flammable
- Xi – Irritant
- R11 – Highly flammable
- R36 – Irritating to eyes
- R67 – Vapors may cause drowsiness and dizziness
- S2 – Keep out of reach of children
- S7 – Keep container tightly closed
- S16 – Keep away from sources of ignition – No smoking
- S24 / S25 – Avoid contact with skin and eyes
- S26 – In case of contact with eyes, rinse immediately with plenty of water and seek medical advice
- US (Federal and State) Regulations and International Chemical Registration Laws TSCA listing
- This product contains ingredients that are listed on or exempt from listing on the EPA Toxic Substance Control Act Chemical Inventory



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- This product does not contain any chemicals subject to EPA Title III of the SARA Listing in Sections 302 and 304
- All ingredients in this product are listed on the European Inventory of Existing Commercial Chemical Substance (EINECS Listing) or are exempted from listing
- All ingredients in this product are listed on the Canada Domestic Substance List (DSL Listing)

SECTION 16. Other information

Disclaimer:

This Safety Data Sheet, which takes into consideration the requirements of Directive 76/768/EC and subsequent amendments and Directive 1999/45/EC plus subsequent amendments, has been prepared in accordance with Directive (EC) 1907/2006. It is believed to be correct and corresponds to the latest scientific/technical knowledge but all data, instructions, recommendations and/or suggestions are made without guarantee. No warranty, expressed or implied, is made and Dynarex Corp. assumes no legal responsibility or liability resulting from its use.

Safety Data Sheet

according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), 29CFR1910/1200 and GHS Rev. 3

Effective date: 12.08.2015**Revision :** 12.10.2015**Trade Name:** Alcojet**1 Identification of the substance/mixture and of the supplier****1.1 Product identifier****Trade Name:** Alcojet**Synonyms:****Product number:** Alcojet**1.2 Application of the substance / the mixture :** Cleaning material/Detergent**1.3 Details of the supplier of the Safety Data Sheet**

Manufacturer	Supplier
Aiconox, Inc. 30 Glenn Street White Plains, NY 10603 1-914-948-4040	Not Applicable

Emergency telephone number:**ChemTel Inc**

North America: 1-800-255-3924

International: 01-813-248-0585

2 Hazards identification**2.1 Classification of the substance or mixture:**

In compliance with EC regulation No. 1272/2008, 29CFR1910/1200 and GHS Rev. 3 and amendments.

Hazard-determining components of labeling:

tetrasodium pyrophosphate
disodium metasilicate
Troclosene Sodium, Dihydrate
Sodium tripolyphosphate

2.2 Label elements:

Skin irritation, category 2.

Eye irritation, category 2A.

Hazard pictograms:**Signal word:** Warning**Hazard statements:**

H315 Causes skin irritation.

H319 Causes serious eye irritation.

Precautionary statements:

P264 Wash skin thoroughly after handling.

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

P302+P352 If on skin: Wash with soap and water.

P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.

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

P501 Dispose of contents and container as instructed in Section 13.

Additional information: None.

Safety Data Sheet

according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), 29CFR1910/1200 and GHS Rev. 3

Effective date: 12.08.2015**Revision :** 12.10.2015**Trade Name:** Alcojet**Hazard description****Hazards Not Otherwise Classified (HNOC):** None**Information concerning particular hazards for humans and environment:**

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

Classification system:

The classification is according to EC regulation No. 1272/2008, 29CFR1910/1200 and GHS Rev. 3 and amendments, and extended by company and literature data. The classification is in accordance with the latest editions of international substances lists, and is supplemented by information from technical literature and by information provided by the company.

3 Composition/information on ingredients**3.1 Chemical characterization :** None**3.2 Description :** None**3.3 Hazardous components (percentages by weight)**

Identification	Chemical Name	Classification	Wt. %
CAS number: 6834-92-0	Disodium Metasilicate	Skin Corr. 1B; H314 Stot SE 3; H335	2.5-10
CAS number: 7722-88-5	Tetrasodium Pyrophosphate	Skin Irrit. 2 ; H315 Eye Irrit. 2; H319	2.5-10
CAS number: 7758-29-4	Sodium tripolyphosphate	Skin Irrit. 2 ; H315 Eye Irrit. 2; H319	25-41
CAS number: 1344-09-8	Silicic acid, sodium salt	Acute Tox. 4; H303 Skin Irrit. 2 ; H315 Eye Dam. 1; H318	8-15
CAS number: 51580-86-0	Troclosene Sodium, Dihydrate	Acute Tox. 4; H303 Eye Irrit. 2; H319 Stot SE 3; H335 Aquatic Acute 1; H400 Aquatic Chronic 1; H410	<3

3.4 Additional Information : None.**4 First aid measures****4.1 Description of first aid measures****General information:** None.**After inhalation:**

Maintain an unobstructed airway.

Loosen clothing as necessary and position individual in a comfortable position.

After skin contact:

Wash affected area with soap and water.

Seek medical attention if symptoms develop or persist.

After eye contact:

Rinse/flush exposed eye(s) gently using water for 15-20 minutes.

Safety Data Sheet

according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), 29CFR1910/1200 and GHS Rev. 3

Effective date: 12.08.2015**Revision :** 12.10.2015**Trade Name:** Alcojet

Remove contact lens(es) if able to do so during rinsing.
Seek medical attention if irritation persists or if concerned.

After swallowing:

Rinse mouth thoroughly.
Seek medical attention if irritation, discomfort, or vomiting persists.

4.2 Most important symptoms and effects, both acute and delayed

None

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

No additional information.

5 Firefighting measures**5.1 Extinguishing media****Suitable extinguishing agents:**

Use appropriate fire suppression agents for adjacent combustible materials or sources of ignition.

For safety reasons unsuitable extinguishing agents : None**5.2 Special hazards arising from the substance or mixture :**

Thermal decomposition can lead to release of irritating gases and vapors.

5.3 Advice for firefighters**Protective equipment:**

Wear protective eye wear, gloves and clothing.
Refer to Section 8.

5.4 Additional information :

Avoid inhaling gases, fumes, dust, mist, vapor and aerosols.
Avoid contact with skin, eyes and clothing.

6 Accidental release measures**6.1 Personal precautions, protective equipment and emergency procedures :**

Ensure adequate ventilation.
Ensure air handling systems are operational.

6.2 Environmental precautions :

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

6.3 Methods and material for containment and cleaning up :

Wear protective eye wear, gloves and clothing.

6.4 Reference to other sections : None**7 Handling and storage****7.1 Precautions for safe handling :**

Avoid breathing mist or vapor.
Do not eat, drink, smoke or use personal products when handling chemical substances.

Safety Data Sheet

according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), 29CFR1910/1200 and GHS Rev. 3

Effective date: 12.08.2015

Revision : 12.10.2015

Trade Name: Alcojet

7.2 Conditions for safe storage, including any incompatibilities :

Store in a cool, well-ventilated area.

7.3 Specific end use(s):

No additional information.

8 Exposure controls/personal protection



8.1 Control parameters :

7722-88-5, tetrasodium pyrophosphate, OSHA TWA 5 mg/m³.

7722-88-5, tetrasodium pyrophosphate, NIOSH TWA 5 mg/m³.

8.2 Exposure controls

Appropriate engineering controls:

Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use or handling.

Respiratory protection:

Not needed under normal conditions.

Protection of skin:

Select glove material impermeable and resistant to the substance.

Eye protection:

Safety goggles or glasses, or appropriate eye protection.

General hygienic measures:

Wash hands before breaks and at the end of work.

Avoid contact with skin, eyes and clothing.

9 Physical and chemical properties

Appearance (physical state, color):	White powder	Explosion limit lower: Explosion limit upper:	Not determined or not available. Not determined or not available.
Odor:	Not determined or not available.	Vapor pressure at 20°C:	Not determined or not available.
Odor threshold:	Not determined or not available.	Vapor density:	Not determined or not available.
pH-value:	11 (aqueous solution)	Relative density:	Not determined or not available.
Melting/Freezing point:	Not determined or not available.	Solubilities:	Not determined or not available.
Boiling point/Boiling range:	Not determined or not available.	Partition coefficient (n-octanol/water):	Not determined or not available.

Safety Data Sheet

according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), 29CFR1910/1200 and GHS Rev. 3

Effective date: 12.08.2015

Revision : 12.10.2015

Trade Name: Alcojet			
Flash point (closed cup):	Not determined or not available.	Auto/Self-ignition temperature:	Not determined or not available.
Evaporation rate:	Not determined or not available.	Decomposition temperature:	Not determined or not available.
Flammability (solid, gaseous):	Not determined or not available.	Viscosity:	a. Kinematic: Not determined or not available. b. Dynamic: Not determined or not available.
Density at 20°C:	Not determined or not available.		

10 Stability and reactivity

- 10.1 Reactivity :** None
- 10.2 Chemical stability :** None
- 10.3 Possibility hazardous reactions :** None
- 10.4 Conditions to avoid :** None
- 10.5 Incompatible materials :** None
- 10.6 Hazardous decomposition products :** None

11 Toxicological information

11.1 Information on toxicological effects :

Acute Toxicity:

Oral:

: LD50 > 5000 mg/kg oral rat - Product .

Chronic Toxicity: No additional information.

Skin corrosion/irritation:

disodium metasilicate: Rabbit: Corrosive - 4h .

Serious eye damage/irritation:

Tetrasodium Pyrophosphate: Rabbit - Risk of serious damage to eyes .

Respiratory or skin sensitization: No additional information.

Carcinogenicity: No additional information.

IARC (International Agency for Research on Cancer): None of the ingredients are listed.

NTP (National Toxicology Program): None of the ingredients are listed.

Germ cell mutagenicity: No additional information.

Reproductive toxicity: No additional information.

STOT-single and repeated exposure:

disodium metasilicate: SE inhalation - May cause respiratory irritation - respiratory system.

Additional toxicological information: No additional information.

Safety Data Sheet

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Effective date: 12.08.2015

Revision : 12.10.2015

Trade Name: Alcojet

12 Ecological information

12.1 Toxicity:

tetrasodium pyrophosphate: Fish, LC50 - other fish - 1,380 mg/l - 96 h.

tetrasodium pyrophosphate: Aquatic invertebrates, EC50 - Daphnia magna (Water flea) - 391 mg/l - 48 h.

Sodium tripolyphosphate: Aquatic invertebrates, EC50 - Daphnia magna (Water flea) - > 100 mg/l - 48 h.

12.2 Persistence and degradability: No additional information.

12.3 Bioaccumulative potential: No additional information.

12.4 Mobility in soil: No additional information.

General notes: No additional information.

12.5 Results of PBT and vPvB assessment:

PBT: No additional information.

vPvB: No additional information.

12.6 Other adverse effects: No additional information.

13 Disposal considerations

13.1 Waste treatment methods (consult local, regional and national authorities for proper disposal)

Relevant Information:

It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities. (US 40CFR262.11).

14 Transport information

14.1 UN Number: ADR, ADN, DOT, IMDG, IATA	None
---	------

14.2 UN Proper shipping name: ADR, ADN, DOT, IMDG, IATA	None
---	------

14.3 Transport hazard classes: ADR, ADN, DOT, IMDG, IATA	Class: None
	Label: None
	LTD. QTY: None

US DOT Limited Quantity Exception:	None
---	------

Bulk:	Non Bulk:
RQ (if applicable): None	RQ (if applicable): None
Proper shipping Name: None	Proper shipping Name: None
Hazard Class: None	Hazard Class: None
Packing Group: None	Packing Group: None
Marine Pollutant (if applicable): No additional information.	Marine Pollutant (if applicable): No additional information.
Comments: None	Comments: None

Safety Data Sheet

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Trade Name: Alcojet	
14.4 Packing group: ADR, ADN, DOT, IMDG, IATA	None
14.5 Environmental hazards :	None
14.6 Special precautions for user: Danger code (Kemler): EMS number: Segregation groups:	None None None None
14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code: Not applicable.	
14.8 Transport/Additional information: Transport category: Tunnel restriction code: UN "Model Regulation":	
	None None None

15 Regulatory information**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture.****North American**

SARA Section 313 (specific toxic chemical listings): None of the ingredients are listed. Section 302 (extremely hazardous substances): None of the ingredients are listed.
CERCLA (Comprehensive Environmental Response, Clean up and Liability Act) Reportable Spill Quantity: None of the ingredients are listed.
TSCA (Toxic Substances Control Act): Inventory: All ingredients are listed. Rules and Orders: Not applicable.
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.

Canadian Canadian Domestic Substances List (DSL): All ingredients are listed.

EU

REACH Article 57 (SVHC): None of the ingredients are listed.
Germany MAK: Not classified.

Asia Pacific

Safety Data Sheet

according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), 29CFR1910/1200 and GHS Rev. 3

Effective date: 12.08.2015**Revision :** 12.10.2015**Trade Name:** Alcojet**Australia****Australian Inventory of Chemical Substances (AICS):** All ingredients are listed.**China****Inventory of Existing Chemical Substances in China (IECSC):** All ingredients are listed.**Japan****Inventory of Existing and New Chemical Substances (ENCS):** All ingredients are listed.**Korea****Existing Chemicals List (ECL):** All ingredients are listed.**New Zealand****New Zealand Inventory of Chemicals (NZOIC):** All ingredients are listed.**Philippines****Philippine Inventory of Chemicals and Chemical Substances (PICCS):** All ingredients are listed.**Taiwan****Taiwan Chemical Substance Inventory (TSCI):** All ingredients are listed.**16 Other information****Abbreviations and Acronyms:** None**Summary of Phrases****Hazard statements:**

H315 Causes skin irritation.

H319 Causes serious eye irritation.

Precautionary statements:

P264 Wash skin thoroughly after handling.

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

P302+P352 If on skin: Wash with soap and water.

P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.

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

P501 Dispose of contents and container as instructed in Section 13.

Manufacturer Statement:

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.

NFPA: 1-0-0**HMIS:** 1-0-0



1. COMPANY AND PRODUCT IDENTIFICATION

iLoveToCreate
A Duncan Enterprises Company
5673 East Shields Avenue
Fresno, CA 93727
559-291-4444
559-291-9444 (Fax)
www.ilovetocreate.com

EMERGENCY TELEPHONE NUMBERS

Health Emergencies:
559-291-4444 7:00 am – 3:30 pm Pacific Std. Time
Spill and Off-Hour Health Emergencies:
800-424-9300 U.S. and Canada
703-527-3887 Outside U.S. and Canada (Collect)

Product Name:

Aleene's Original Tacky Glue

2oz-15600
8oz-15599
16oz-15601
8oz-15606
16oz-15607
128oz-15611
3pk-25804
2/3oz-24355
3oz tube-21372
Brush on-21704
64oz-33611

Product Description/Use:
Restrictions On Use:

Adhesive
None known

2. HAZARDS IDENTIFICATION

Emergency Overview: Not classified. Read entire Safety Data Sheet.

Hazard Class	None
Hazard Category	None
Pictograms	None
Precautionary Statements	
Prevention	Not prescribed
Response	Not prescribed
Storage	Not prescribed
Disposal	Not prescribed
Classification complies with OSHA Hazard Communication Standart (29 CFR 1910.1200) and is consistent with the provisions of the United Nations Globally harmonized System of Classification and Labelin of Chemicals (GHS).	

See section 11 for additional toxicological information.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Detailed formualtion is submitted by the client and it is proprietary information.

Products are made by physical manipulation and chemical reaction from the ingredients. These ingredient chemicals may not exist as its original formula in final products. None of these ingredients are hazardous substances.

Hazardous Components	CAS Number	%
None	None	None

4. FIRST AID MEASURES

Inhalation:	Move to fresh air. If breathing is difficult, give oxygen. If symptoms develop and persist, seek medical attention.
Skin Contact:	Wash with soap. If symptoms develop and persist, get medical attention. Wash affected area immediately with soap and water. Remove contaminated clothing and footwear. If symptoms develop and persist, see medical attention.
Eye Contact:	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If symptoms develop and persist, get medical attention.
Ingestion:	If material is ingested, immediately contact a physician or poison control center. DO NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person.
Notes to Physician:	Treat symptomatically and supportively.
Symptoms:	See section 11.

5. FIRE FIGHTING MEASURES

Extinguishing Media:	Water spray (fog), foam, dry chemical or carbon dioxide. Use extinguishing measures appropriate for local circumstances and the surrounding environment.
Special Firefighting Procedures:	Wear self-contained breathing apparatus. Do not breathe combustion gases.
Unusually fire or explosion hazards:	This product is a aqueous mixture which will not burn. If evaporated to dryness, the solid residue may pose a moderate fire hazard. Closed containers may rupture (due to build up of pressure) when exposed to extreme heat.
Hazardous combustions products:	Upon decomposition, this product emits carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.

6. ACCIDENTAL RELEASE MEASURES

Use personal protection recommended in Section 8, isolate the hazard area and deny entry to unnecessary and unprotected personnel.	
Environmental precautions:	Prevent further leakage or spillage if safe to do so. Prevent contamination of soil and water.
Clean-Up methods:	Keep unnecessary personnel away. Ensure adequate ventilation. Wear appropriate protective equipment and clothing during clean-up. Small spills can be absorbed with vermiculite, clay or other suitable non-biodegradable absorbent material, scooped up and placed in containers. For large spills dike ahead and collect liquid. Dispose of contaminated material as waste according to Section 13.

7. HANDLING AND STORAGE

Handling:	Wash thoroughly after handling. Use only with adequate ventilation. Avoid contact with eyes, skin, and clothing. Do not taste or swallow. Keep container closed. Do not breathe gas/fumes/vapor/spray.
Storage:	For safe storage, store between 5° C (41°F) and 37°C (98° F). Keep the container tightly closed and in a cool, well ventilated place. Protect from freezing.

For information on product shelf life, please review labels on container or check the Technical Data Sheet.

8. EXPOSURE CONTROL AND PERSONAL PROTECTION

Employers should complete an assessment of all workplaces to determine the need for, and selection of, proper exposure controls and protective equipment for each task performed.

Hazardous Components:	None
ACGIH TLV:	None
OSHA PEL:	None
AIHA WEEL:	None
OTHER:	None
Engineering Controls:	Work should be done in an adequately ventilated area (i.e., ventilation sufficient to maintain concentrations below one half of the PEL and other relevant standards). Local exhaust ventilation is recommended when general ventilation is not sufficient to control airborne contamination.
Respiratory Protection:	Use NIOSH approved respirator if there is potential to exceed exposure limit(s). Observe OSHA regulations for respirator use (29 CFR 1910.134).
Eye/Face Protection:	Wear safety glasses with side shields. Full face protection should be used if the potential for splashing or spraying of product exists.
Skin Protection:	Use impermeable gloves and protective clothing as necessary to prevent skin contact.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	Liquid
Color:	White
Odor:	Slight
Odor Threshold:	Not available.
pH:	4.5
Vapor Pressure:	Not determined.
Boiling Point/Range:	100.0° C (212°F) Approximately
Melting Point/Range:	< 5°C (<41°F) (Freezing Point)
Specific gravity:	1.08
Vapor Density:	Not determined.
Flash Point:	No flash point up to 100°C. Aqueous preparation.
Flammable/Explosive Limits – Lower:	Not available.
Flammable/Explosive Limits – Upper:	Not available.
Autoignition temperature:	Not applicable.
Evaporation rate:	Not determined.
Solubility in water:	Miscible
Partition coefficient (n-octanol/water):	Not determined.
VOC content:	Not available.
Viscosity:	Not available.
Decomposition temperature:	Not available.

10. STABILITY AND REACTIVITY

Stability:	Stable under normal conditions of storage and use.
Hazardous reactions:	Will not occur.
Hazardous decomposition products:	Oxides of Carbon. Thermal decomposition can lead to release of irritating gases and vapors.
Incompatible materials:	This product may react with strong oxidizing agents.
Conditions to Avoid:	Freezing conditions.

11. TOXICOLOGICAL INFORMATION

Relevant routes of exposure	Skin, inhalation, eyes.
Potential Health Effects/Symptoms	
Inhalation:	Inhalation of vapors of mists of the product may be irritating to the respiratory system.
Skin Contact:	No skin irritation can be expected from single short-term exposure to this product. Prolonged or repeated contact may produce some irritation.
Eye Contact:	May cause slight irritation to eyes on contact.
Ingestion:	May cause gastrointestinal tract irritation if swallowed. Not expected under normal conditions of use.

Hazardous Components	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)
None	None	None	None
Hazardous Components		Health Effects/Target Organs	
None		None	

12. ECOLOGICAL INFORMATION

Ecological information: No data available.

13. DISPOSAL CONSIDERATIONS

Information provided is for unused product only.

Recommended method of disposal:	Legal disposition of wastes is the responsibility of the owner/generator of the waste. Applicable federal, state and/or local regulation must be followed during treatment, storage, or disposal of waste containing this product.
Hazardous waste number:	To the best of our knowledge, this product is not listed nor does it meet the criteria of a hazardous waste if discarded in its purchased form. However, under RCRA, it is the responsibility of the user to determine at the time of disposal whether a product meets any of the RCRA hazardous waste criteria. This is because product uses, transformation, mixtures, processes, etc., may render the resulting material hazardous, under the criteria ignitability, corrosively, reactivity and toxicity characteristics under the new Toxicity Characteristics Leaching Procedure (TCLP) 40 Code of Federal Regulations 261.20-24.

14. TRANSPORT INFORMATION

U.S. Department of Transportation Ground (49 CFR)	
Proper shipping name:	Not regulated.
Hazard class or division:	None
Identification number:	None
Packing group:	None
International Air Transportation (ICAO/IATA)	
Proper shipping name:	Not regulated.
Hazard class or division:	None
Identification number:	None
Packing group:	None

Water Transportation (INO/IMDG)	
Proper shipping name:	Not regulated.
Hazard class or division:	None
Identification number:	None
Packing group:	None

15. REGULATORY INFORMATION

United States Regulatory Information	
TSCA 8 (b) Inventory Status:	All components are listed or are exempt from the listing on the Toxic Substances Control Act Inventory.
TSCA 12(b) Export Notification:	None above reporting de minimus.
CERCLA/SARA Section 302 EHS:	None above reporting de minimus.
CERCLA/SARA Section 311/312:	Immediate Health
CERCLA/SARA 313	None above reporting de minimus.
California Proposition 65:	This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.
Canada Regulatory Information	
CEPA DSL/NDSL Status:	All components are listed on or are exempt from listing on the Canadian Domestic Substances List.
WHMIS hazard class:	Not Controlled

16. OTHER INFORMATION

This material safety data sheet contains changes from the previous versions in sections: New information added in Section(s): 15

Disclaimer: The data contained herein are furnished for information only and are believed to be reliable. We do not assume responsibility for any results obtained by persons over whose methods whom we have no control. It is the user's responsibility to determine the suitability of the product(s) mentioned above or any production methods mentioned herein for a particular purpose, and to adopt such precautions as may be advisable for the protection of property and persons against any hazards that may be involved in the handling and use of any of these products. In light of the foregoing specifically disclaimed all warranties, express or implied, including warranties of merchantability and fitness for a particular purpose, arising from sale or use of the products mentioned in this document. Further disclaims all liability for consequential or incidental damages of any kind, including lost profits.

Date Issued: 4/30/2013

END SAFETY DATA SHEET

Date Issued	Revision Date	Version
April 30, 2013	Sept. 2, 2014	2
	December 30, 2015	3



Safety Data Sheet

24 Hour Emergency Phone Numbers

Medical/Poison Control:

In U.S.: Call 1-800-222-1222

Outside U.S.: Call your local poison control center

Transportation/National Response Center:

1-800-535-5053

1-352-323-3500

NOTE: The National Response Center emergency numbers to be used only in the event of chemical emergencies involving a spill, leak, fire, exposure or accident involving chemicals.

IMPORTANT: Provide this information to employees, customers, and users of this product. Read this SDS before handling or disposing of this product. This product is covered by the OSHA Hazard Communication Standard and this document has been prepared in accordance with requirements of this standard. All abbreviated terms used in this MSDS are further described in Section 16.

1. Identification

This Material Safety Data Sheet is available in American Spanish upon request.
Los Datos de Seguridad del Producto pueden obtenerse en Espanol si lo requiere.

Product Name:	Alex Plus Acrylic Latex Caulk Plus Silicone - All Colors	Revision Date:	6/19/2015
Product UPC Number:	11440, 18101, 18107, 18109, 18110, 18111, 18112, 18128, 18135, 18136, 18155, 18172	Supersedes Date:	3/27/2012
Product Use/Class:	Caulking Compound	SDS No:	00010002001
Manufacturer:	DAP Products Inc. 2400 Boston Street Suite 200 Baltimore, MD 21224-4723 888-327-8477 (non - emergency matters)		
Preparer:	Regulatory Department		

2. Hazards Identification

EMERGENCY OVERVIEW: Under normal use conditions, this product is not expected to cause adverse health effects.

GHS Classification

Not a hazardous substance or mixture.

Symbol(s) of Product

None

Signal Word

Not a hazardous substance or mixture.

3. Composition/Information on Ingredients

Chemical Name	CAS-No.	Wt. %	GHS Symbols	GHS Statements
Limestone	1317-65-3	50-75	GHS03	H270
Petroleum distillates	64741-88-4	1.0-2.5	GHS03-GHS06	H270-331

Diethylene glycol dibenzoate	120-55-8	1.0-2.5	GHS03-GHS07	H270-312
Titanium dioxide	13463-67-7	0.1-1.0	No Information	No Information
Quartz	14808-60-7	0.1-1.0	GHS03-GHS07	H270-302
Carbon black	1333-86-4	0.1-1.0	No Information	No Information

The text for GHS Hazard Statements shown above (if any) is given in the "Other information" Section.

4. First-aid Measures

FIRST AID - INHALATION: Material is not likely to present an inhalation hazard at ambient conditions. If you experience difficulty in breathing, leave the area to obtain fresh air. If continued difficulty is experienced, get medical attention immediately.

FIRST AID - SKIN CONTACT: No health hazards are known to exist. In case of contact, wash skin immediately with soap and water.

FIRST AID - EYE CONTACT: In case of contact, immediately flush eyes with large quantities of water for at least 15 minutes until irritation subsides. Get medical attention immediately.

FIRST AID - INGESTION: If swallowed, DO NOT INDUCE VOMITING. Get medical attention immediately.

5. Fire-fighting Measures

UNUSUAL FIRE AND EXPLOSION HAZARDS: None known.

SPECIAL FIREFIGHTING PROCEDURES: Wear self-contained breathing apparatus pressure-demand (NIOSH approved or equivalent) and full protective gear. Use water spray to cool exposed surfaces.

EXTINGUISHING MEDIA: Carbon Dioxide, Dry Chemical, Foam, Water Fog

6. Accidental Release Measures

ENVIRONMENTAL MEASURES: No Information

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED: Contain spilled material and remove with inert absorbent. Dispose of contaminated absorbent, container and unused contents in accordance with local, state and federal regulations. Scrape up dried material and place into containers. Use personal protective equipment as necessary. In case of spillage, absorb with inert material and dispose of in accordance with applicable regulations.

7. Handling and Storage

HANDLING: KEEP OUT OF REACH OF CHILDREN. DO NOT TAKE INTERNALLY. Use only with adequate ventilation. Ensure fresh air entry during application and drying. Wash thoroughly after handling.

STORAGE: Avoid excessive heat and freezing. Do not store at temperatures above 120 degrees F. Store away from caustics and oxidizers.

8. Exposure Controls/Personal Protection

Ingredients with Occupational Exposure Limits

Chemical Name	ACGIH TLV-TWA	ACGIH-TLV STEL	OSHA PEL-TWA	OSHA PEL-CEILING
Limestone	N.E.	N.E.	15 mg/m3 TWA total dust, 5 mg/m3 TWA respirable fraction	N.E.
Petroleum distillates	N.E.	N.E.	N.E.	N.E.
Diethylene glycol dibenzoate	N.E.	N.E.	N.E.	N.E.
Titanium dioxide	10 mg/m3 TWA	N.E.	15 mg/m3 TWA total dust	N.E.
Quartz	0.025 mg/m3 TWA respirable fraction	N.E.	N.E.	N.E.
Carbon black	3 mg/m3 TWA inhalable fraction	N.E.	3.5 mg/m3 TWA	N.E.

Further Advice: MEL = Maximum Exposure Limit OES = Occupational Exposure Standard SUP = Supplier's Recommendation Sk = Skin Sensitizer N.E. = Not Established

Personal Protection



RESPIRATORY PROTECTION: No personal respiratory protective equipment normally required. National Institute for Occupational Safety and Health (NIOSH) has recommended that the permissible exposure limit be changed to 50 micrograms respirable free silica per cubic meter of air (0.05 mg/m³) as determined by a full shift sample up to 10-hour work shift.



SKIN PROTECTION: Rubber gloves.



EYE PROTECTION: Goggles or safety glasses with side shields.



OTHER PROTECTIVE EQUIPMENT: Not required under normal use.



HYGIENIC PRACTICES: Wash hands before breaks and at the end of workday. Remove and wash contaminated clothing before re-use.

9. Physical and Chemical Properties

Appearance:	Colored	Physical State:	Paste
Odor:	Very Slight Ammonia	Odor Threshold:	Not Established
Density, g/cm ³ :	1.64 - 1.67	pH:	Between 7.0 and 12.0
Freeze Point, °C:	Not Established	Viscosity (mPa.s):	Not Established
Solubility in Water:	Not Established	Partition Coeff., n-octanol/water:	Not Established
Decomposition Temperature, °C:	Not Established	Explosive Limits, %:	N.I. - N.I.
Boiling Range, °C:	N.I. - N.I.	Auto-Ignition Temperature, °C	Not Established
Minimum Flash Point, °C:	93.3	Vapor Pressure, mmHg:	No Information
Evaporation Rate:	Slower Than n-Butyl Acetate	Flash Method:	Seta Closed Cup
Vapor Density:	Heavier Than Air		
Combustibility:	Does not support combustion		

(See "Other information" Section for abbreviation legend)

(If product is an aerosol, the flash point stated above is that of the propellant.)

10. Stability and Reactivity

STABILITY: Stable under recommended storage conditions.

CONDITIONS TO AVOID: Excessive heat and freezing.

INCOMPATIBILITY: Incompatible with strong bases and oxidizing agents.

HAZARDOUS DECOMPOSITION PRODUCTS: Normal decomposition products, i.e., CO_x, NO_x.

11. Toxicological Information

EFFECT OF OVEREXPOSURE - INHALATION: Under normal use conditions, this product is not expected to cause adverse health effects. Inhalation of vapors in high concentration may cause mild irritation of respiratory system (nose, mouth, mucous membranes).

EFFECT OF OVEREXPOSURE - SKIN CONTACT: Under normal use conditions, this product is not expected to cause adverse

health effects. Prolonged or repeated contact with skin may cause mild irritation.

EFFECT OF OVEREXPOSURE - EYE CONTACT: Under normal use conditions, this product is not expected to cause adverse health effects. Direct eye contact may cause irritation.

EFFECT OF OVEREXPOSURE - INGESTION: Under normal use conditions, this product is not expected to cause adverse health effects. Single dose oral toxicity is very low. Amounts ingested incidental to industrial handling are not likely to cause injury; however, ingestion of large amounts may cause injury.

CARCINOGENICITY: No Information

PRIMARY ROUTE(S) OF ENTRY: Inhalation, Skin Contact

Acute Toxicity Values

The acute effects of this product have not been tested. Data on individual components are tabulated below

<u>CAS-No.</u>	<u>Chemical Name</u>	<u>Oral LD50</u>	<u>Dermal LD50</u>	<u>Vapor LC50</u>
1317-65-3	Limestone	6450 mg/kg Rat	>2000 mg/kg	>20 mg/L
64741-88-4	Petroleum distillates	>5000 mg/kg Rat	>2000 mg/kg Rabbit	2.18 mg/L Rat
120-55-8	Diethylene glycol dibenzoate	2830 mg/kg Rat	2000 mg/kg Rabbit	> 200 mg/L Rat
13463-67-7	Titanium dioxide	>10000 mg/kg Rat	>5000 mg/kg Rabbit	>20 mg/L
14808-60-7	Quartz	500 mg/kg Rat	>2000 mg/kg	>20 mg/L
1333-86-4	Carbon black	>8000 mg/kg Rat	>3000 mg/kg Rabbit	6.750 mg/m3 Rat

N.I. = No Information

12. Ecological Information

ECOLOGICAL INFORMATION: Ecological injuries are not known or expected under normal use.

13. Disposal Information

DISPOSAL INFORMATION: This product does not meet the definition of a hazardous waste according to U.S. EPA Hazardous Waste Management Regulation, 40 CFR Section 261. Dispose as hazardous waste according to all local, state, federal and provincial regulations. State and Local regulations/restrictions are complex and may differ from Federal regulations. Responsibility for proper waste disposal is with the owner of the waste.

14. Transport Information

SPECIAL TRANSPORT PRECAUTIONS: No Information

DOT UN/NA Number: N.A.
 DOT Proper Shipping Name: Not Regulated.
 DOT Technical Name: N.A.
 DOT Hazard Class: N.A.
 Hazard SubClass: N.A.
 Packing Group: N.A.

15. Regulatory Information

U.S. Federal Regulations:

RCRA - SARA Hazard Category

This product has been reviewed according to the EPA 'Hazard Categories' promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

Acute Health Hazard, Chronic Health Hazard

SARA SECTION 313

This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR part 372:

No Sara 313 components exist in this product.

TOXIC SUBSTANCES CONTROL ACT

All ingredients in this product are either on TSCA inventory list, or otherwise exempt. This product contains the following chemical substances subject to the reporting requirements of TSCA 12(B) if exported from the United States:

No TSCA 12(b) components exist in this product.

CALIFORNIA PROPOSITION 65 CARCINOGENS

WARNING: This product contains chemicals known to the State of California to cause cancer.

CALIFORNIA PROPOSITION 65 REPRODUCTIVE TOXINS

This product does not contain any chemicals known to the State of California to cause birth defects or other reproductive harm.

International Regulations: As follows -

CANADIAN WHMIS

This MSDS has been prepared in compliance with Controlled Product Regulations except for the use of the 16 headings.

WHMIS Class Consumer Commodity

16. Other Information

Revision Date: 6/19/2015 Supersedes Date: 3/27/2012
 Reason for revision: HazCom2012/GHS Conversion
 Datasheet produced by: Regulatory Department

HMIS Ratings:




Health:	1	Flammability:	1	Reactivity:	0	Personal Protection:	X
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VOC Less Water Less Exempt Solvent, g/L:42.6
 VOC Material, g/L:31
 VOC as Defined by California Consumer Product Regulation, Wt/Wt%:0.8

Text for GHS Hazard Statements shown in Section 3 describing each ingredient:

- H270 May cause or intensify fire; oxidiser.
- H302 Harmful if swallowed.
- H312 Harmful in contact with skin.
- H331 Toxic if inhaled.

Icons for GHS Pictograms shown in Section 3 describing each ingredient:

- GHS03 
- GHS06 
- GHS07 

Legend: N.A. - Not Applicable, N.E. - Not Established, N.D. - Not Determined

DAP believes the data and statements contained herein are accurate as of the date hereof. They are offered in good faith as typical values and not as a product specification. NO WARRANTY OF MERCHANTABILITY, WARRANTY OF FITNESS FOR ANY PARTICULAR PURPOSE OR ANY OTHER WARRANTY, EXPRESS OR IMPLIED, IS MADE WITH REGARD TO THE INFORMATION HEREIN PROVIDED OR THE PRODUCT TO WHICH THE INFORMATION REFERS. Since this document is intended only as a guide to the appropriate use and precautionary handling of the referenced product by a properly trained person, it is therefore the responsibility of the user to (i) review the recommendations with due consideration for the specific context of the intended use and (ii) determine if they are appropriate.

SAFETY DATA SHEET



Date of issue/Date of revision 24 September 2016

Version 8

Section 1. Identification

Product name : ALKYD 150 S-GL WH 1516-0100N
Product code : 00406609
Other means of identification : Not available.
Product type : Liquid.

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

Product use : Industrial applications, Used by spraying.
Use of the substance/mixture : Coating.
Uses advised against : Not applicable.

Manufacturer : PPG Industries, Inc.
One PPG Place
Pittsburgh, PA 15272
Emergency telephone number : (412) 434-4515 (U.S.)
(514) 645-1320 (Canada)
01-800-00-21-400 (Mexico)

Technical Phone Number : 1-800-441-9695 (8:00 am to 5:00 pm EST)

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 LIQUIDS - Category 3
CARCINOGENICITY - Category 1A
TOXIC TO REPRODUCTION (Unborn child) - Category 2
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (central nervous system (CNS)) - Category 1
Percentage of the mixture consisting of ingredient(s) of unknown toxicity: 46.7%

GHS label elements

Hazard pictograms :



Signal word : Danger

Section 2. Hazards identification

Hazard statements : Flammable liquid and vapor.
May cause cancer.
Suspected of damaging the unborn child.
Causes damage to organs through prolonged or repeated exposure. (central nervous system (CNS))

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. Use explosion-proof electrical, ventilating, lighting and all material-handling equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Keep container tightly closed. Do not breathe vapor. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling.

Response : Get medical attention if you feel unwell. IF exposed or concerned: Get medical attention. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.

Storage : Store locked up. Store in a well-ventilated place. Keep cool.

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

Supplemental label elements : Sanding and grinding dusts may be harmful if inhaled. This product contains crystalline silica which can cause lung cancer or silicosis. The risk of cancer depends on the duration and level of exposure to dust from sanding surfaces or mist from spray applications. Repeated exposure to high vapor concentrations may cause irritation of the respiratory system and permanent brain and nervous system damage. Inhalation of vapor/aerosol concentrations above the recommended exposure limits causes headaches, drowsiness and nausea and may lead to unconsciousness or death. Avoid contact with skin and clothing. Wash thoroughly after handling. Emits toxic fumes when heated. DANGER - RAGS, STEEL WOOL OR WASTE SOAKED WITH THIS PRODUCT MAY SPONTANEOUSLY CATCH FIRE IF IMPROPERLY DISCARDED. IMMEDIATELY AFTER EACH USE, PLACE RAGS, STEEL WOOL OR WASTE IN A SEALED WATER-FILLED METAL CONTAINER.

Hazards not otherwise classified : Prolonged or repeated contact may dry skin and cause irritation.

Section 3. Composition/information on ingredients

Substance/mixture : Mixture
Product name : ALKYD 150 S-GL WH 1516-0100N

Ingredient name	%	CAS number
solvent naphtha (petroleum), medium aliph.	≥10 - <20	64742-88-7
titanium dioxide	≥10 - ≤20	13463-67-7
Limestone	≥10 - ≤20	1317-65-3
Stoddard solvent	≥5.0 - <10	8052-41-3
Kaolin	≥1.0 - ≤5.0	1332-58-7
2-butanone oxime	<1.0	96-29-7
crystalline silica, respirable powder (<10 microns)	<1.0	14808-60-7
ethylbenzene	<1.0	100-41-4

Section 3. Composition/information on ingredients

2-ethylhexanoic acid	<1.0	149-57-5
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SUB codes represent substances without registered CAS Numbers.

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

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 or the environment and hence require reporting in this section.

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

Section 4. First aid measures

If ingestion, irritation, any type of overexposure or symptoms of overexposure occur during or persists after use of this product, contact a POISON CONTROL CENTER, EMERGENCY ROOM OR PHYSICIAN immediately; have Safety Data Sheet information available. Never give anything by mouth to an unconscious or convulsing person.

Description of necessary first aid measures

- Eye contact** : Remove contact lenses, irrigate copiously with clean, fresh water, holding the eyelids apart for at least 10 minutes and seek immediate medical advice.
- Inhalation** : Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.
- Skin contact** : Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners.
- Ingestion** : If swallowed, seek medical advice immediately and show this container or label. Keep person warm and at rest. Do NOT induce vomiting.

Most important symptoms/effects, acute and delayed

Potential acute health effects

- Eye contact** : No known significant effects or critical hazards.
- Inhalation** : No known significant effects or critical hazards.
- Skin contact** : Defatting to the skin. May cause skin dryness and irritation.
- Ingestion** : No known significant effects or critical hazards.

Over-exposure signs/symptoms

- Eye contact** : No specific data.
- Inhalation** : Adverse symptoms may include the following:
reduced fetal weight
increase in fetal deaths
skeletal malformations
- Skin contact** : Adverse symptoms may include the following:
irritation
dryness
cracking
reduced fetal weight
increase in fetal deaths
skeletal malformations

Section 4. First aid measures

Ingestion : Adverse symptoms may include the following:
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. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media : Use dry chemical, CO₂, water spray (fog) or foam.

Unsuitable extinguishing media : Do not use water jet.

Specific hazards arising from the chemical : Flammable liquid and vapor. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Runoff to sewer may create fire or explosion hazard. This material is harmful to aquatic life with long lasting effects. 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
metal oxide/oxides

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. 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).

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). 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 ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. 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. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.

Section 7. Handling and storage

- Special precautions** : Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Vapors are heavier than air and may spread along floors. Materials such as cleaning rags, paper wipes and protective clothing, which are contaminated with the product may spontaneously self-ignite some hours later. To avoid the risks of fires, all contaminated materials should be stored in purpose-built containers or in metal containers with tight-fitting, self-closing lids. Contaminated materials should be removed from the workplace at the end of each working day and be stored outside. If this material is part of a multiple component system, read the Safety Data Sheet(s) for the other component or components before blending as the resulting mixture may have the hazards of all of its parts.
- 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.
- Conditions for safe storage, including any incompatibilities** : Do not store above the following temperature: 35°C (95°F). Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
solvent naphtha (petroleum), medium aliph.	ACGIH TLV (United States). TWA: 400 ppm
titanium dioxide	OSHA PEL (United States, 2/2013). TWA: 100 ppm 8 hours. OSHA PEL (United States, 2/2013). TWA: 400 mg/m ³ 8 hours.
Limestone	OSHA PEL (United States, 2/2013). TWA: 15 mg/m ³ 8 hours. Form: Total dust ACGIH TLV (United States, 3/2015). TWA: 10 mg/m ³ 8 hours.
Stoddard solvent	OSHA PEL (United States, 2/2013). TWA: 5 mg/m ³ 8 hours. Form: Respirable fraction TWA: 15 mg/m ³ 8 hours. Form: Total dust ACGIH TLV (United States, 3/2015). TWA: 525 mg/m ³ 8 hours. TWA: 100 ppm 8 hours.
Kaolin	OSHA PEL (United States, 2/2013). TWA: 2900 mg/m ³ 8 hours. TWA: 500 ppm 8 hours. ACGIH TLV (United States, 3/2015). TWA: 2 mg/m ³ 8 hours. Form: Respirable

Section 8. Exposure controls/personal protection

2-butanone oxime	fraction OSHA PEL (United States, 2/2013). TWA: 5 mg/m ³ 8 hours. Form: Respirable fraction
crystalline silica, respirable powder (<10 microns)	fraction TWA: 15 mg/m ³ 8 hours. Form: Total dust IPEL (PPG). TWA: 3 ppm STEL: 9 ppm OSHA PEL Z3 (United States, 2/2013). TWA: 10 mg/m ³ / (%SiO ₂ +2) 8 hours. Form: Respirable TWA: 250 mppcf / (%SiO ₂ +5) 8 hours. Form: Respirable ACGIH TLV (United States, 3/2015). TWA: 0.025 mg/m ³ 8 hours. Form: Respirable fraction
ethylbenzene	OSHA PEL Z3 (United States). TWA: 30 mg/m ³ Form: Total dust ACGIH TLV (United States, 3/2015). TWA: 20 ppm 8 hours. OSHA PEL (United States, 2/2013). TWA: 435 mg/m ³ 8 hours. TWA: 100 ppm 8 hours. ACGIH TLV (United States, 3/2015). TWA: 5 mg/m ³ 8 hours. Form: Inhalable fraction and vapor
2-ethylhexanoic acid	

Key to abbreviations

A	= Acceptable Maximum Peak	S	= Potential skin absorption
ACGIH	= American Conference of Governmental Industrial Hygienists.	SR	= Respiratory sensitization
C	= Ceiling Limit	SS	= Skin sensitization
F	= Fume	STEL	= Short term Exposure limit values
IPEL	= Internal Permissible Exposure Limit	TD	= Total dust
OSHA	= Occupational Safety and Health Administration.	TLV	= Threshold Limit Value
R	= Respirable	TWA	= Time Weighted Average
Z	= OSHA 29 CFR 1910.1200 Subpart Z - Toxic and Hazardous Substances		

Consult local authorities for acceptable exposure limits.

Recommended monitoring procedures : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

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.

Section 8. Exposure controls/personal protection

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 glasses with side shields.
- Skin protection**
- Hand protection** : 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.
- Gloves** : For prolonged or repeated handling, use the following type of gloves:

Recommended: nitrile rubber
- Body protection** : 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.
- Other skin protection** : 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.
- Respiratory protection** : Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. If workers are exposed to concentrations above the exposure limit, they must use appropriate, certified respirators. Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary.

Section 9. Physical and chemical properties

Appearance

- Physical state** : Liquid.
- Color** : Not available.
- Odor** : Characteristic.
- Odor threshold** : Not available.
- pH** : Not available.
- Melting point** : Not available.
- Boiling point** : >37.78°C (>100°F)
- Flash point** : Closed cup: 41°C (105.8°F)
- Material supports combustion.** : Yes.
- Auto-ignition temperature** : Not available.
- Decomposition temperature** : Not available.

Section 9. Physical and chemical properties

Flammability (solid, gas)	: Not available.
Lower and upper explosive (flammable) limits	: Lower: 0.61% Upper: 6.75%
Evaporation rate	: Not available.
Vapor pressure	: Not available.
Vapor density	: Not available.
Relative density	: 1.26
Density (lbs / gal)	: 10.52
Solubility	: Insoluble in the following materials: cold water.
Partition coefficient: n-octanol/water	: Not available.
Viscosity	: Kinematic (40°C (104°F)): >0.21 cm ² /s (>21 cSt)
Volatility	: 48% (v/v), 29.763% (w/w)
% Solid. (w/w)	: 70.237

Section 10. Stability and reactivity

Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	: The product is stable.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: When exposed to high temperatures may produce hazardous decomposition products. Refer to protective measures listed in sections 7 and 8.
Incompatible materials	: Keep away from the following materials to prevent strong exothermic reactions: oxidizing agents, strong alkalis, strong acids.
Hazardous decomposition products	: Decomposition products may include the following materials: carbon monoxide, carbon dioxide, smoke, oxides of nitrogen.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Section 11. Toxicological information

Product/ingredient name	Result	Species	Dose	Exposure
Solvent naphtha (petroleum), medium aliph.	LD50 Dermal	Rabbit	>3000 mg/kg	-
titanium dioxide	LD50 Oral	Rat	>5000 mg/kg	-
Stoddard solvent	LD50 Oral	Rat	>11 g/kg	-
Kaolin	LD50 Oral	Rat	>5 g/kg	-
2-butanone oxime	LD50 Oral	Rat	>5000 mg/kg	-
ethylbenzene	LC50 Inhalation Vapor	Rat	930 mg/kg	-
	LD50 Dermal	Rabbit	4000 ppm	4 hours
	LD50 Oral	Rabbit	17.8 g/kg	-
	LD50 Oral	Rat	3.5 g/kg	-
2-ethylhexanoic acid	LD50 Dermal	Rabbit	1.26 g/kg	-
	LD50 Oral	Rat	1600 mg/kg	-

Conclusion/Summary : There are no data available on the mixture itself.

Irritation/Corrosion**Conclusion/Summary**

Skin : There are no data available on the mixture itself.

Eyes : There are no data available on the mixture itself.

Respiratory : There are no data available on the mixture itself.

Sensitization**Conclusion/Summary**

Skin : There are no data available on the mixture itself.

Respiratory : There are no data available on the mixture itself.

Mutagenicity

Conclusion/Summary : There are no data available on the mixture itself.

Carcinogenicity

Conclusion/Summary : There are no data available on the mixture itself.

Classification

Product/ingredient name	OSHA	IARC	NTP
titanium dioxide	-	2B	-
crystalline silica, respirable powder (<10 microns)	-	1	Known to be a human carcinogen.
ethylbenzene	-	2B	-

Carcinogen Classification code:

IARC: 1, 2A, 2B, 3, 4

NTP: Known to be a human carcinogen; Reasonably anticipated to be a human carcinogen

OSHA: +

Not listed/not regulated: -

Reproductive toxicity

Conclusion/Summary : There are no data available on the mixture itself.

Teratogenicity

Conclusion/Summary : There are no data available on the mixture itself.

Specific target organ toxicity (single exposure)

Section 11. Toxicological information

Name	Category
Solvent naphtha (petroleum), medium aliph.	Category 3

Specific target organ toxicity (repeated exposure)

Name	Category
Solvent naphtha (petroleum), medium aliph.	Category 1
Stoddard solvent	Category 1
crystalline silica, respirable powder (<10 microns)	Category 1
ethylbenzene	Category 2

Target organs : Contains material which causes damage to the following organs: brain, skin.
 Contains material which may cause damage to the following organs: kidneys, lungs, liver, upper respiratory tract, central nervous system (CNS), eye, lens or cornea, stomach, testes.

Aspiration hazard

Name	Result
Solvent naphtha (petroleum), medium aliph.	ASPIRATION HAZARD - Category 1
Stoddard solvent	ASPIRATION HAZARD - Category 1
ethylbenzene	ASPIRATION HAZARD - Category 1

Information on the likely routes of exposure**Potential acute health effects**

Eye contact : No known significant effects or critical hazards.
Inhalation : No known significant effects or critical hazards.
Skin contact : Defatting to the skin. May cause skin dryness and irritation.
Ingestion : No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact : No specific data.
Inhalation : Adverse symptoms may include the following:
 reduced fetal weight
 increase in fetal deaths
 skeletal malformations
Skin contact : Adverse symptoms may include the following:
 irritation
 dryness
 cracking
 reduced fetal weight
 increase in fetal deaths
 skeletal malformations
Ingestion : Adverse symptoms may include the following:
 reduced fetal weight
 increase in fetal deaths
 skeletal malformations

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

Section 11. Toxicological information

Conclusion/Summary : There are no data available on the mixture itself. This product contains crystalline silica which can cause lung cancer or silicosis. The risk of cancer depends on the duration and level of exposure to dust from sanding surfaces or mist from spray applications. Exposure to component solvent vapor concentrations in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness. Solvents may cause some of the above effects by absorption through the skin. There is some evidence that repeated exposure to organic solvent vapors in combination with constant loud noise can cause greater hearing loss than expected from exposure to noise alone. If splashed in the eyes, the liquid may cause irritation and reversible damage. Ingestion may cause nausea, diarrhea and vomiting. This takes into account, where known, delayed and immediate effects and also chronic effects of components from short-term and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact.

Short term exposure

Potential immediate effects : There are no data available on the mixture itself.

Potential delayed effects : There are no data available on the mixture itself.

Long term exposure

Potential immediate effects : There are no data available on the mixture itself.

Potential delayed effects : There are no data available on the mixture itself.

Potential chronic health effects

General : Causes damage to organs through prolonged or repeated exposure. Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.

Carcinogenicity : May cause cancer. Risk of cancer depends on duration and level of exposure.

Mutagenicity : No known significant effects or critical hazards.

Teratogenicity : Suspected of damaging the unborn child.

Developmental effects : No known significant effects or critical hazards.

Fertility effects : No known significant effects or critical hazards.

Not available.

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
titanium dioxide	Acute LC50 >100 mg/l Fresh water	Daphnia - Daphnia magna	48 hours
ethylbenzene	Acute LC50 150 to 200 mg/l Fresh water	Fish - Lepomis macrochirus - Young of the year	96 hours

Persistence and degradability

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

Section 12. Ecological information

Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
Stoddard solvent	3.16 to 7.06	-	high
2-butanone oxime	0.63	5.01	low
ethylbenzene	3.15	79.43	low
2-ethylhexanoic acid	2.64	-	low

Mobility in soil

Soil/water partition coefficient (K_{oc}) : Not available.

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. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees. Section 6. Accidental release measures

14. Transport information

	DOT	IMDG	IATA
UN number	UN1263	UN1263	UN1263
UN proper shipping name	PAINT	PAINT	PAINT
Transport hazard class (es)	3	3	3
Packing group	III	III	III
Environmental hazards	No.	No.	No.
Marine pollutant substances	Not applicable.	Not applicable.	Not applicable.
Product RQ (lbs)	30869.2	Not applicable.	Not applicable.

14. Transport information

RQ substances	(xylene)	Not applicable.	Not applicable.
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Additional information

- DOT** : This product may be re-classified as "Combustible Liquid," unless transported by vessel or aircraft. Non-bulk packages (less than or equal to 119 gal) of combustible liquids are not regulated as hazardous materials in package sizes less than the product reportable quantity.
- IMDG** : None identified.
- IATA** : None identified.

Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Section 15. Regulatory information**United States**

United States inventory (TSCA 8b) : All components are listed or exempted.

SARA 302/304

SARA 304 RQ : Not applicable.

Composition/information on ingredients

No products were found.

SARA 311/312

Classification : Fire hazard
Immediate (acute) health hazard
Delayed (chronic) health hazard

Composition/information on ingredients

Name	Fire hazard	Sudden release of pressure	Reactive	Immediate (acute) health hazard	Delayed (chronic) health hazard
solvent naphtha (petroleum), medium aliph.	Yes.	No.	No.	Yes.	Yes.
titanium dioxide	No.	No.	No.	No.	Yes.
Stoddard solvent	Yes.	No.	No.	Yes.	Yes.
2-butanone oxime	Yes.	No.	No.	Yes.	Yes.
crystalline silica, respirable powder (<10 microns)	No.	No.	No.	No.	Yes.
ethylbenzene	Yes.	No.	No.	Yes.	Yes.
2-ethylhexanoic acid	No.	No.	No.	Yes.	Yes.

SARA 313

	<u>Chemical name</u>	<u>CAS number</u>	<u>Concentration</u>
Supplier notification	: ethylbenzene	100-41-4	0.1 - 1

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

Section 15. Regulatory information

Additional environmental information is contained on the Environmental Data Sheet for this product, which can be obtained from your PPG representative.

California Prop. 65

WARNING: This product contains a chemical known to the State of California to cause cancer.

Section 16. Other information

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

Health : 2 * Flammability : 2 Physical hazards : 0

(*) - Chronic effects

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 are not required on MSDSs 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 mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

The customer is responsible for determining the PPE code for this material.

National Fire Protection Association (U.S.A.)

Health : 2 Flammability : 2 Instability : 0

Date of previous issue : 5/1/2016

Organization that prepared the MSDS : EHS

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

▼ Indicates information that has changed from previously issued version.

Disclaimer

The information contained in this data sheet is based on present scientific and technical knowledge. The purpose of this information is to draw attention to the health and safety aspects concerning the products supplied by PPG, and to recommend precautionary measures for the storage and handling of the products. No warranty or guarantee is given in respect of the properties of the products. No liability can be accepted for any failure to observe the precautionary measures described in this data sheet or for any misuse of the products.

Material Safety Data Sheet

24 Hour Assistance:
1-847-367-7700
Rust-Oleum Corp.
www.rustoleum.com

Section 1 - Chemical Product / Company Information

Product Name: American Accents Country Home
Collection Brush Topcoat
Revision Date: 11/15/2004

Identification Number: 7960504, 7960730, 7962504, 7962730,
7963504, 7963730, 7964504, 7964730,
7965504, 7965730, 7961730, 7961504

Product Use/Class: Topcoat/Water Based Acrylic

Supplier: Rust-Oleum Corporation
11 Hawthorn Parkway
Vernon Hills, IL 60061
USA

Manufacturer: Rust-Oleum Corporation
11 Hawthorn Parkway
Vernon Hills, IL 60061
USA

Preparer: Department, Regulatory

Section 2 - Composition / Information On Ingredients

Chemical Name	CAS Number	Weight % Less Than	ACGIH TLV-TWA	ACGIH TLV-STEL	OSHA PEL-TWA	OSHA PEL-CEILING
Titanium Dioxide	13483-87-7	10.0	10 mg/m ³	N.E.	10 mg/m ³	N.E.
Propylene Glycol	57-55-6	5.0	N.E.	N.E.	N.E.	N.E.
Dipropylene Glycol Monobutyl Ether	29911-28-2	5.0	N.E.	N.E.	N.E.	N.E.

Section 3 - Hazards Identification

*** Emergency Overview ***: Use ventilation necessary to keep exposures below recommended exposure limits, if any.

Effects Of Overexposure - Eye Contact: Causes eye irritation.

Effects Of Overexposure - Skin Contact: Substance may cause slight skin irritation.

Effects Of Overexposure - Inhalation: Low hazard for usual industrial handling or commercial handling by trained personnel.

Effects Of Overexposure - Ingestion: Substance may be harmful if swallowed.

Effects Of Overexposure - Chronic Hazards: Contains: Propylene Glycol. Human systemic effects by ingestion: general anesthesia, convulsions, changes in surface EEG.

Primary Route(s) Of Entry: Skin Absorption, Inhalation, Eye Contact

Section 4 - First Aid Measures

First Aid - Eye Contact: Hold eyelids apart and flush with plenty of water for at least 15 minutes. Get medical attention.

First Aid - Skin Contact: Wash with soap and water. Get medical attention if irritation develops or persists.

First Aid - Inhalation: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get immediate medical attention.

First Aid - Ingestion: Swallowing less than an ounce will not cause significant harm. For larger amounts, do not induce vomiting, but give one or two glasses of water to drink and get medical attention.

Section 5 - Fire Fighting Measures

Flash Point: >212 F
(Setaflash)

LOWER EXPLOSIVE LIMIT: 0.6 %
UPPER EXPLOSIVE LIMIT : 22.7 %

Extinguishing Media: Dry Chemical, Foam, Water Fog

Unusual Fire And Explosion Hazards: FLASH POINT IS TESTED TO BE GREATER THAN 200 DEGREES F.

Special Firefighting Procedures: Water may be used to cool closed containers to prevent buildup of steam.

Section 6 - Accidental Release Measures

Steps To Be Taken If Material Is Released Or Spilled: Dispose of according to local, state (provincial) and federal regulations. Do not incinerate closed containers.

Section 7 - Handling And Storage

Handling: Avoid contact with eyes. Wash hands before eating. Wash thoroughly after handling.

Storage: Keep from freezing. Keep container closed when not in use.

Section 8 - Exposure Controls / Personal Protection

Engineering Controls: Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Prevent build-up of vapors by opening all doors and windows to achieve cross-ventilation.

Respiratory Protection: A respiratory protection program that meets OSHA 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.

Skin Protection: Nitrile or Neoprene gloves may afford adequate skin protection. Use gloves to prevent prolonged skin contact.

Eye Protection: Use safety eyewear designed to protect against splash of liquids.

Other protective equipment: Refer to safety supervisor or industrial hygienist for further information regarding personal protective equipment and its application.

Hygienic Practices: Wash thoroughly with soap and water before eating, drinking or smoking.

Section 9 - Physical And Chemical Properties

Boiling Range:	369 - 471 F	Vapor Density:	Heavier than air
Odor:	Ammonia Like	Odor Threshold:	ND
Appearance:	Liquid	Evaporation Rate:	Slower than Ether
Solubility in H ₂ O:	Soluble		
Freeze Point:	ND	Specific Gravity:	1.1600
Vapor Pressure:		PH:	NE
Physical State:	Liquid		

(See section 16 for abbreviation legend)

Section 10 - Stability And Reactivity

Conditions To Avoid: Avoid contact with strong acid and strong bases.

Incompatibility: Incompatible with strong oxidizing agents, strong acids and strong alkalies.

Hazardous Decomposition: When heated to decomposition it emits acrid smoke and irritating fumes. By open flame, carbon monoxide and carbon dioxide.

Hazardous Polymerization: Will not occur under normal conditions.

Stability: This product is stable under normal storage conditions.

Section 11 - Toxicological Information

Product LD50: ND

Product LC50: ND

<u>Chemical Name</u>	<u>LD50</u>	<u>LC50</u>
Titanium Dioxide	>7500 mg/kg (ORAL, RAT)	N.D.
Propylene Glycol	20000 mg/kg (ORAL, RAT)	N.D.
Dipropylene Glycol Monobutyl Ether	4400 mg/kg (ORAL, RAT)	N.D.

Section 12 - Ecological Information

Ecological Information: Product is a mixture of listed components.

Section 13 - Disposal Information

Disposal Information: Dispose of material in accordance to local, state and federal regulations and ordinances. Do not allow to enter storm drains or sewer systems.

Section 14 - Transportation Information

DOT Proper Shipping Name:	Paint	Packing Group:	--
DOT Technical Name:	--	Hazard Subclass:	Not Regulated
DOT Hazard Class:	--	Resp. Guide Page:	--
DOT UN/NA Number:	--		

Section 15 - Regulatory Information

CERCLA - SARA Hazard Category

This product has been reviewed according to the EPA "Hazard Categories" promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

IMMEDIATE HEALTH HAZARD, CHRONIC HEALTH HAZARD

SARA Section 313:

Listed below are the substances (if any) contained in this product that are subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR part 372:

None known

Toxic Substances Control Act:

Listed below are the substances (if any) contained in this product that are subject to the reporting requirements of TSCA 12(B) if exported from the United States:

None known

U.S. State Regulations: As follows -

New Jersey Right-to-Know:

The following materials are non-hazardous, but are among the top five components in this product.

<u>Chemical Name</u>	<u>CAS Number</u>
Water	7732-18-5
Modified Acrylic Copolymer	PROPRIETARY
Calcium Carbonate	1317-65-3

Pennsylvania Right-to-Know:

The following non-hazardous ingredients are present in the product at greater than 3%.

<u>Chemical Name</u>	<u>CAS Number</u>
Water	7732-18-5
Modified Acrylic Copolymer	PROPRIETARY
Calcium Carbonate	1317-65-3

California Proposition 65:

These products contain no known chemicals known by the State of California to cause cancer.

These products contain no known chemicals known by the State of California to cause birth defects or other reproductive harm.

International Regulations: As follows -

CANADIAN WHMIS:

This MSDS has been prepared in compliance with Controlled Product Regulations except for the use of the 16 headings.

CANADIAN WHMIS CLASS: D2B

Section 16 - Other Information

HMIS Ratings:

Health: 1

Flammability: 0

Reactivity: 0

Personal Protection: X

VOLATILE ORGANIC COMPOUNDS, g/l: NA

REASON FOR REVISION:

Legend: N.A. - Not Applicable, N.E. - Not Established, N.D. - Not Determined

The information contained on this MSDS has been checked and should be accurate. However, it is the responsibility of the user to comply with all Federal, State, and Local laws and regulations.

SAFETY DATA SHEET

85-148

Section 1. Identification

Product name : AMERIMAX® SeamerMate® Professional Grade Permanent Gutter Seal
Gray

Product code : 85-148

Other means of identification : Not available.

Product type : Liquid.

Relevant identified uses of the substance or mixture and uses advised against
Not applicable.

Manufacturer : Amerimax Home Products, Inc.
Lancaster, PA

Emergency telephone number of the company : (216) 566-2917

Product Information Telephone Number : (800) 347-2586

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 : SKIN CORROSION/IRRITATION - Category 2
SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A
CARCINOGENICITY - Category 1B
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 toxicity: 28.8%

GHS label elements

Hazard pictograms :



Signal word : Danger

Hazard statements : Causes serious eye irritation.
Causes skin irritation.
May cause cancer.
May be fatal if swallowed and enters airways.
May cause respiratory irritation.
May cause drowsiness and dizziness.
May cause damage to organs through prolonged or repeated exposure.

Section 2. Hazards identification

Precautionary statements

- General** : Read label before use. Keep out of reach of children. If medical advice is needed, have product container or label at hand.
- 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. Use only outdoors or in a well-ventilated area. Do not breathe vapor. Wash hands thoroughly after handling.
- 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.
- 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.
Please refer to the SDS for additional information. Do not transfer contents to other containers for storage.
- 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
Tetrachloroethylene	≥50 - <75	127-18-4
Styrene-Hydrocarbon Copolymer	≥5 - <10	9011-11-4
Styrene-Butadiene Polymer	≥5 - <10	66070-58-4
Polybutene	≥3 - <5	9003-29-6
Hydrocarbon Polymer	≥3 - <5	62258-49-5
Polybutene	≥3 - <5	9003-29-6
1,2,4-Trimethylbenzene	≥1 - <2	95-63-6
Light Aromatic Hydrocarbons	≥1 - <3	64742-95-6
Cumene	≥0.1 - <0.3	98-82-8

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

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. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
- Skin contact** : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. 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 and 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
- Skin contact** : Adverse symptoms may include the following:
irritation
redness
- Ingestion** : Adverse symptoms may include the following:
nausea or vomiting

Section 4. First aid measures

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

- Notes to physician** : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
- 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. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

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** : In a fire or if heated, a pressure increase will occur and the container may burst. 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
halogenated compounds
carbonyl halides
metal oxide/oxides
- 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.
- 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. Do not touch or walk through spilled material. 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 specialised 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

Date of issue/*Date of revision* : 11/10/2015 *Date of previous issue* : 5/1/2015 *Version* : 2 4/14

Section 6. Accidental release measures

- Small spill** : Stop leak if without risk. Move containers from spill area. 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. 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). Avoid exposure - obtain special instructions before use. 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 release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

- 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.

- Conditions for safe storage, including any incompatibilities** : Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
Tetrachloroethylene	ACGIH TLV (United States, 3/2015). TWA: 25 ppm 8 hours. TWA: 170 mg/m ³ 8 hours. STEL: 100 ppm 15 minutes. STEL: 685 mg/m ³ 15 minutes. OSHA PEL Z2 (United States, 2/2013). TWA: 100 ppm 8 hours. CEIL: 200 ppm AMP: 300 ppm 5 minutes.
Styrene-Hydrocarbon Copolymer	None.
Styrene-Butadiene Polymer	None.
Polybutene	None.
Hydrocarbon Polymer	None.
Polybutene	None.
1,2,4-Trimethylbenzene	ACGIH TLV (United States, 3/2015). TWA: 25 ppm 8 hours.

Section 8. Exposure controls/personal protection

Light Aromatic Hydrocarbons
Cumene

TWA: 123 mg/m³ 8 hours.
NIOSH REL (United States, 10/2013).
 TWA: 25 ppm 10 hours.
 TWA: 125 mg/m³ 10 hours.
 None.
ACGIH TLV (United States, 3/2015).
 TWA: 50 ppm 8 hours.
NIOSH REL (United States, 10/2013).
Absorbed through skin.
 TWA: 50 ppm 10 hours.
 TWA: 245 mg/m³ 10 hours.
OSHA PEL (United States, 2/2013).
Absorbed through skin.
 TWA: 50 ppm 8 hours.
 TWA: 245 mg/m³ 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.

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

Hand protection : 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.

Body protection : 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.

Other skin protection : 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.

Respiratory protection : Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Section 9. Physical and chemical properties

Appearance

Physical state	: Liquid.
Color	: Not available.
Odor	: Not available.
Odor threshold	: Not available.
pH	: Not available.
Melting point	: Not available.
Boiling point	: 121°C (249.8°F)
Flash point	: Closed cup: >93.3°C (>199.9°F)
Evaporation rate	: 2.59 (butyl acetate = 1)
Flammability (solid, gas)	: Not available.
Lower and upper explosive (flammable) limits	: Lower: 0.7% Upper: 7%
Vapor pressure	: 0.32 kPa (2.399 mm Hg) [at 20°C]
Vapor density	: 4.1 [Air = 1]
Relative density	: 1.23
Solubility	: Not available.
Partition coefficient: n-octanol/water	: Not available.
Auto-ignition temperature	: Not available.
Decomposition temperature	: Not available.
Viscosity	: Kinematic (room temperature): <0.205 cm ² /s (<20.5 cSt) Kinematic (40°C (104°F)): <0.205 cm ² /s (<20.5 cSt)
Molecular weight	: Not applicable.

Aerosol product

Heat of combustion : 4.187 kJ/g

Section 10. Stability and reactivity

Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	: The product is stable.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: No specific data.
Incompatible materials	: No specific data.
Hazardous decomposition products	: 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
Tetrachloroethylene	LD50 Oral	Rat	2629 mg/kg	-
1,2,4-Trimethylbenzene	LC50 Inhalation Vapor	Rat	18000 mg/m ³	4 hours
	LD50 Oral	Rat	5 g/kg	-
Light Aromatic Hydrocarbons	LD50 Oral	Rat	8400 mg/kg	-
Cumene	LC50 Inhalation Vapor	Rat	39000 mg/m ³	4 hours
	LD50 Oral	Rat	1400 mg/kg	-

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Tetrachloroethylene	Eyes - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
	Eyes - Mild irritant	Rabbit	-	162 milligrams	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
	Skin - Severe irritant	Rabbit	-	24 hours 810 milligrams	-
Light Aromatic Hydrocarbons	Eyes - Mild irritant	Rabbit	-	24 hours 100 microliters	-
Cumene	Eyes - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
	Eyes - Mild irritant	Rabbit	-	86 milligrams	-
	Skin - Mild irritant	Rabbit	-	24 hours 10 milligrams	-
	Skin - Moderate irritant	Rabbit	-	24 hours 100 milligrams	-

Sensitization

Not available.

Mutagenicity

Not available.

Carcinogenicity

Not available.

Classification

Product/ingredient name	OSHA	IARC	NTP
Tetrachloroethylene	-	2A	Reasonably anticipated to be a human carcinogen.
Cumene	-	2B	Reasonably anticipated to be a human carcinogen.

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Section 11. Toxicological information

Name	Category	Route of exposure	Target organs
Tetrachloroethylene	Category 3	Not applicable.	Respiratory tract irritation and Narcotic effects
1,2,4-Trimethylbenzene	Category 3	Not applicable.	Respiratory tract irritation and Narcotic effects
Light Aromatic Hydrocarbons	Category 3	Not applicable.	Respiratory tract irritation and Narcotic effects
Cumene	Category 3	Not applicable.	Respiratory tract irritation and Narcotic effects

Specific target organ toxicity (repeated exposure)

Name	Category	Route of exposure	Target organs
Tetrachloroethylene	Category 2	Not determined	Not determined
1,2,4-Trimethylbenzene	Category 2	Not determined	Not determined
Light Aromatic Hydrocarbons	Category 2	Not determined	Not determined
Cumene	Category 2	Not determined	Not determined

Aspiration hazard

Name	Result
Styrene-Hydrocarbon Copolymer	ASPIRATION HAZARD - Category 1
Styrene-Butadiene Polymer	ASPIRATION HAZARD - Category 1
Polybutene	ASPIRATION HAZARD - Category 1
Hydrocarbon Polymer	ASPIRATION HAZARD - Category 1
Polybutene	ASPIRATION HAZARD - Category 1
1,2,4-Trimethylbenzene	ASPIRATION HAZARD - Category 1
Light Aromatic Hydrocarbons	ASPIRATION HAZARD - Category 1
Cumene	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 and 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.

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
- Skin contact** : Adverse symptoms may include the following:
 irritation
 redness
- Ingestion** : Adverse symptoms may include the following:
 nausea or vomiting

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** : May cause cancer. Risk of cancer depends on duration and level of exposure.
- 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** : No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Route	ATE value
Oral	3480.5 mg/kg
Inhalation (vapors)	747.3 mg/l

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
Tetrachloroethylene	Acute EC50 504 ppm Marine water Acute EC50 3.64 mg/l Fresh water	Algae - Skeletonema costatum	96 hours
		Algae - Chlamydomonas reinhardtii - Exponential growth phase	72 hours
	Acute EC50 7500 µg/l Fresh water	Daphnia - Daphnia magna - Instar	48 hours
	Acute LC50 3.5 mg/l Marine water	Crustaceans - Elminius modestus	48 hours
	Acute LC50 4000 µg/l Fresh water	Fish - Jordanella floridae - Juvenile (Fledgling, Hatchling, Weanling)	96 hours
	Chronic EC10 1.77 mg/l Fresh water	Algae - Chlamydomonas	72 hours

Section 12. Ecological information

1,2,4-Trimethylbenzene	Chronic NOEC 0.4 mg/l Fresh water	reinhardtii - Exponential growth phase	
	Chronic NOEC 500 µg/l Fresh water	Daphnia - Daphnia magna	21 days
Cumene	Acute LC50 4910 µg/l Marine water	Fish - Pimephales promelas - Larvae	32 days
		Crustaceans - Elasmopus pecteniscrus - Adult	48 hours
	Acute LC50 7720 µg/l Fresh water	Fish - Pimephales promelas	96 hours
		Acute EC50 2600 µg/l Fresh water	Algae - Pseudokirchneriella subcapitata
	Acute EC50 7400 µg/l Fresh water	Crustaceans - Artemia sp. - Nauplii	48 hours
Acute EC50 10600 µg/l Fresh water	Daphnia - Daphnia magna - Neonate	48 hours	
Acute LC50 2700 µg/l Fresh water	Fish - Oncorhynchus mykiss	96 hours	

Persistence and degradability

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Light Aromatic Hydrocarbons	-	-	Readily

Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
Tetrachloroethylene	-	49	low
Polybutene	-	314 to 1882	high
Polybutene	-	314 to 1882	high
1,2,4-Trimethylbenzene	-	243	low
Light Aromatic Hydrocarbons	-	10 to 2500	high
Cumene	-	94.69	low

Mobility in soil







Soil/water partition coefficient (K_{oc}) : 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. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	DOT Classification	TDG Classification	Mexico Classification	IATA	IMDG
UN number	UN1897	UN1897	UN1897	UN1897	UN1897
UN proper shipping name	Tetrachloroethylene mixture	Tetrachloroethylene mixture	Tetrachloroethylene mixture	Tetrachloroethylene mixture	Tetrachloroethylene mixture. Marine pollutant (Tetrachloroethylene)
Transport hazard class(es)	6.1 	6.1 	6.1 	6.1 	6.1  
Packing group	III	III	III	III	III
Environmental hazards	No.	No.	No.	No.	Yes.
Additional information	<u>Special provisions</u> Not Applicable <u>ERG No.</u> 160	Product classified as per the following sections of the Transportation of Dangerous Goods Regulations: 2.26-2.36 (Class 6). <u>Special provisions</u> Not Applicable <u>ERG No.</u> 160	<u>Special provisions</u> (ERG#160) <u>ERG No.</u> 160	The environmentally hazardous substance mark may appear if required by other transportation regulations. <u>Special provisions</u> Not Applicable	The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg. <u>Emergency schedules (EmS)</u> F-A, S-A

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 73/78 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	0
Physical hazards	0

The customer is responsible for determining the PPE code for this material.

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 are not required on SDSs 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 mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

Procedure used to derive the classification

Classification	Justification
Skin Irrit. 2, H315	Calculation method
Eye Irrit. 2A, H319	Calculation method
Carc. 1B, H350	Calculation method
STOT SE 3, H335	Calculation method
STOT SE 3, H336	Calculation method
STOT RE 2, H373	Calculation method
Asp. Tox. 1, H304	Calculation method

History

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Date of issue/Date of revision : 11/10/2015

Date of previous issue : 5/1/2015

Version : 2

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 73/78 = 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

Section 16. Other information

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. 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.

FLINN SCIENTIFIC, INC.

Safety Data Sheet (SDS)

SDS #: 53.00

Revision Date: March 21, 2014

SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Ammonium Chloride

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

CHEMTREC Emergency Phone Number: (800) 424-9300

Signal Word **WARNING**

Pictograms



SECTION 2 — HAZARDS IDENTIFICATION

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

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

SECTION 3 — COMPOSITION, INFORMATION ON INGREDIENTS

Component Name	CAS Number	Formula	Formula Weight	Concentration
Ammonium chloride	12125-02-9	NH ₄ Cl	53.49	
Synonym: Ammonium muriate				

SECTION 4 — FIRST AID MEASURES

Call a POISON CENTER or physician if you feel unwell (P301+P312).

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

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do so. Continue rinsing. (P305+P351+P338).

If on skin: Wash with plenty of water.

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

SECTION 5 — FIRE FIGHTING MEASURES

Nonflammable solid.

When heated to decomposition, may emit toxic fumes.

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

NFPA Code

None
established

SECTION 6 — ACCIDENTAL RELEASE MEASURES

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

SECTION 7 — HANDLING AND STORAGE

Flinn Suggested Chemical Storage Pattern: Inorganic #2. Store with acetates, halides, sulfates, sulfites, thiosulfates and phosphates. Somewhat hygroscopic. Store in a cool, dry place within a Flinn Chem-Saf™ bag. Use a fume hood when heating.

SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION

Wear protective gloves, protective clothing, and eye protection. Wash hands thoroughly after handling. Exposure guidelines: (as fume) TLV 10 mg/m³, STEL 20 mg/m³ (ACGIH).

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

White, hygroscopic crystal. Odorless.
Soluble: Water and glycerin. Slightly in alcohol.

Boiling point: 520 °C
Melting point: 337.8 °C
Specific gravity: 1.53

SECTION 10 — STABILITY AND REACTIVITY

Avoid contact with strong acids and bases.
Shelf life: Fair to poor, somewhat hygroscopic. See Section 7 for further information.

SECTION 11 — TOXICOLOGICAL INFORMATION

Acute effects: Irritant.
Chronic effects: N.A.
Target organs: N.A.

ORL-RAT LD₅₀: 1650 mg/kg
IHL-RAT LC₅₀: N.A.
SKN-RBT LD₅₀: N.A.

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

SECTION 12 — ECOLOGICAL INFORMATION

Data not yet available.

SECTION 13 — DISPOSAL CONSIDERATIONS

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

SECTION 14 — TRANSPORT INFORMATION

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

N/A = Not applicable

SECTION 15 — REGULATORY INFORMATION

TSCA-listed, EINECS-listed (235-186-4).

SECTION 16 — OTHER INFORMATION

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

Revision Date: March 21, 2014

FLINN SCIENTIFIC, INC.

Safety Data Sheet (SDS)

SDS #: 58.05

Revision Date: December 13, 2013

SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Ammonium Hydroxide Solution, 1M or Less

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 2). Causes skin irritation (H315).

Hazard class: Serious eye damage or irritation (Category 1). Causes serious eye damage (H318).

SECTION 3 — COMPOSITION, INFORMATION ON INGREDIENTS

Component Name	CAS Number	Formula	Formula Weight	Concentration
Ammonium hydroxide	1336-21-6	NH ₄ OH	35.05	4% or less
Water	7732-18-5	H ₂ O	18.00	96% or more

SECTION 4 — FIRST AID MEASURES

Call a POISON CENTER or physician if you feel unwell.

If inhaled: Remove victim to fresh air and keep at rest in a position comfortable for breathing.**If in eyes:** Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or physician (P305+P351+P338+P310).**If on skin:** Wash with plenty of water (P302+P352). **If skin irritation occurs:** Get medical advice or attention (P332+P313).**If swallowed:** Rinse mouth. Do NOT induce vomiting.

SECTION 5 — FIRE FIGHTING MEASURES

Nonflammable, noncombustible solution.

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

NFPA CODE

None
established

SECTION 6 — ACCIDENTAL RELEASE MEASURES

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

SECTION 7 — HANDLING AND STORAGE

Flinn Suggested Chemical Storage Pattern: Inorganic #4. Store in a dedicated base cabinet. If a cabinet is not available, store in a Flinn Saf-Cube™. Keep container tightly closed (P233).

SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION

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

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

Clear, colorless liquid. Strong ammonia odor.

Odor threshold: 5-50 ppm as ammonia
pH: basic

SECTION 10 — STABILITY AND REACTIVITY

Avoid contact with acids, copper, galvanized iron, and aluminum.
Shelf life: Indefinite, if stored properly.

SECTION 11 — TOXICOLOGICAL INFORMATION

Acute effects: Toxic, corrosive to skin, eyes, and respiratory tract,
lachrymator
Chronic effects: N.A.
Target organs: N.A.

ORL-RAT LD₅₀: 350 mg/kg as ammonia water
IHL-HUMAN TLC₀: 408 ppm as ammonia water
SKN-RBT LD₅₀: N.A.

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

SECTION 12 — ECOLOGICAL INFORMATION

Data not yet available.

SECTION 13 — DISPOSAL CONSIDERATIONS

Please review all federal, state and local regulations that may apply before proceeding.
Flinn Suggested Disposal Method #10 is one option.

SECTION 14 — TRANSPORT INFORMATION

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

N/A = Not applicable

SECTION 15 — REGULATORY INFORMATION

TSCA-listed, EINECS-listed (215-647-6), RCRA code D002.

SECTION 16 — OTHER INFORMATION

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FLINN SCIENTIFIC, INC.

Safety Data Sheet (SDS)

SDS #: 61.00

Revision Date: March 21, 2014

SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Ammonium Nitrate

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

CHEMTREC Emergency Phone Number: (800) 424-9300

Signal Word **WARNING**

Pictograms



SECTION 2 — HAZARDS IDENTIFICATION

Hazard class: Oxidizing solids (Category 3). May intensify fire; oxidizer (H272). Keep away from heat, sparks, open flames, and hot surfaces. No smoking (P210).

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

Hazard class: Serious eye damage or irritation (Category 2B). Causes eye irritation (H320).

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

SECTION 3 — COMPOSITION, INFORMATION ON INGREDIENTS

Component Name	CAS Number	Formula	Formula Weight	Concentration
Ammonium nitrate	6484-52-2	NH ₄ NO ₃	80.04	
Synonym: Nitric acid, ammonium salt				

SECTION 4 — FIRST AID MEASURES

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

If inhaled: Remove victim to fresh air and keep at rest in a position comfortable for breathing (P304+P340). **If in eyes:** Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do so. Continue rinsing (P305+P351+P338).

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

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

SECTION 5 — FIRE FIGHTING MEASURES

Nonflammable, noncombustible solid.

May explode under confinement and high temperatures or if exposed to reducing agents.

When heated to decomposition, may emit toxic fumes.

In case of fire: Use a tri-class dry chemical fire extinguisher. Take any precautions to avoid mixing with combustibles (P221+P370+P378).

NFPA CODE

H-0

F-0

R-3

OX

SECTION 6 — ACCIDENTAL RELEASE MEASURES

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

SECTION 7 — HANDLING AND STORAGE

Flinn Suggested Chemical Storage Pattern: Inorganic #8. Store with borates, chromates, manganates, and permanganates. Store away from all combustibles. Keep and store away from clothing and combustible materials (P220). Take any precautions to avoid mixing with combustibles (P221). Keep container tightly closed (P233). Use only in a hood or well-ventilated area (P271).

SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION

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

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

White crystals. Odorless.
Soluble: Water, alcohol, and alkalies.

Boiling point: 210 °C (decomposes)
Melting point: 170 °C
Specific gravity: 1.725

SECTION 10 — STABILITY AND REACTIVITY

Store away from any source of combustion or ignition. Avoid contact with reducing agents, strong acids, finely powdered metals, and organic materials. Do not grind in a mortar and pestle - potentially shock sensitive.
Shelf life: Good, if stored properly.

SECTION 11 — TOXICOLOGICAL INFORMATION

Acute effects: Irritant, gastrointestinal disturbances.	ORL-RAT LD ₅₀ : 2217 mg/kg
Chronic effects: N.A.	IHL-RAT LC ₅₀ : N.A.
Target organs: Blood, central nervous system.	SKN-RBT LD ₅₀ : N.A.

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

SECTION 12 — ECOLOGICAL INFORMATION

Data not yet available.

SECTION 13 — DISPOSAL CONSIDERATIONS

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

SECTION 14 — TRANSPORT INFORMATION

Shipping name: Ammonium Nitrate. Hazard class: 5.1, Oxidizer. UN number: UN1942.

N/A = Not applicable

SECTION 15 — REGULATORY INFORMATION

TSCA-listed, EINECS-listed (229-347-8), RCRA code D001, D003.

SECTION 16 — OTHER INFORMATION

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Revision Date: March 21, 2014

FLINN SCIENTIFIC, INC.

Safety Data Sheet (SDS)

SDS #: 70.50

Revision Date: February 6, 2014

SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Amylase

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

CHEMTREC Emergency Phone Number: (800) 424-9300

Signal Word N/A

Pictograms

SECTION 2 — HAZARDS IDENTIFICATION

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

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

Product should be treated as a chemical and is not for consumption as it has been stored with other nonfood-grade chemicals.

SECTION 3 — COMPOSITION, INFORMATION ON INGREDIENTS

Component Name	CAS Number	Formula	Formula Weight	Concentration
a-Amylase (from <i>Aspergillus oryzae</i>)	None established		~52 kDa	

SECTION 4 — FIRST AID MEASURES

Call a POISON CENTER or physician if you feel unwell.

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

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

If on skin: Wash with plenty of water.

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

SECTION 5 — FIRE FIGHTING MEASURES

Nonflammable solid.

When heated to decomposition, may emit toxic fumes.

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

NFPA Code
None
established

SECTION 6 — ACCIDENTAL RELEASE MEASURES

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

SECTION 7 — HANDLING AND STORAGE

Flinn Suggested Chemical Storage Pattern: Organic #2. Store with alcohols, glycols, amines and amides.

SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION

Avoid contact with eyes. Wash hands thoroughly after handling.

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

Tan powder. Malt-like odor.
Soluble: Water

SECTION 10 — STABILITY AND REACTIVITY

Shelf life: Indefinite, if stored properly.

SECTION 11 — TOXICOLOGICAL INFORMATION

Acute effects: N.A.	ORL-RAT LD ₅₀ : >15 g/kg
Chronic effects: N.A.	IHL-RAT LC ₅₀ : N.A.
Target organs: N.A.	SKN-RBT LD ₅₀ : N.A.

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

SECTION 12 — ECOLOGICAL INFORMATION

Data not yet available.

SECTION 13 — DISPOSAL CONSIDERATIONS

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

SECTION 14 — TRANSPORT INFORMATION

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

N/A = Not applicable

SECTION 15 — REGULATORY INFORMATION

Not listed.

SECTION 16 — OTHER INFORMATION

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

Revision Date: February 6, 2014



SAFETY DATA SHEET

1. Identification

Product identifier **Appearance 2000**

Other means of identification

Product code 9641/5/55

Recommended use Floor Finish

Recommended restrictions None known.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Company name Fuller Commercial Products
Address One Fuller Way
Great Bend, KS 67530
United States
Telephone Customer Service (800) 810-4829
E-mail Not available.
Emergency phone number CHEMTREC (800) 424-9300
Emergency (620) 792-1711
24 hour Emergency (800) 424-9300

2. Hazard(s) identification

Physical hazards Not classified.

Health hazards Not classified.

Environmental hazards Not classified.

OSHA defined hazards Not classified.

Label elements

Hazard symbol None.

Signal word Warning

Hazard statement Direct contact with eyes may cause temporary irritation. May Cause Skin Irritation. The mixture does not meet the criteria for classification.

Precautionary statement

Prevention Observe good industrial hygiene practices.

Response If exposed or concerned: Get medical advice/attention.

Storage Store away from incompatible materials.

Disposal Dispose of waste and residues in accordance with local authority requirements.

Hazard(s) not otherwise classified (HNOC) None known.

Supplemental information None.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
DIETHYLENE GLYCOL MONOETHYL ETHER		111-90-0	5 - < 10
TRIBUTOXYETHYLPHOSPHATE		78-51-3	1 - < 3
AMMONIUM HYDROXIDE		1336-21-6	< 0.2
Other components below reportable levels			90 - 100

*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First-aid measures

Inhalation	Move to fresh air. Call a physician if symptoms develop or persist.
Skin contact	Wash off with soap and water. Get medical attention if irritation develops and persists.
Eye contact	Rinse with water. Get medical attention if irritation develops and persists.
Ingestion	Rinse mouth. Get medical attention if symptoms occur.
Most important symptoms/effects, acute and delayed	Direct contact with eyes may cause temporary irritation.
Indication of immediate medical attention and special treatment needed	Treat symptomatically.
General information	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire-fighting measures

Suitable extinguishing media	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO ₂).
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical	During fire, gases hazardous to health may be formed.
Special protective equipment and precautions for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire-fighting equipment/instructions	Move containers from fire area if you can do so without risk.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.
General fire hazards	No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. For personal protection, see section 8 of the SDS.
Methods and materials for containment and cleaning up	Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water. Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.
Environmental precautions	Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling	Avoid prolonged exposure. Observe good industrial hygiene practices.
Conditions for safe storage, including any incompatibilities	Store in original tightly closed container. Keep out of the reach of children. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value
AMMONIUM HYDROXIDE (CAS 1336-21-6)	PEL	35 mg/m ³
		50 ppm

US. ACGIH Threshold Limit Values

Components	Type	Value
AMMONIUM HYDROXIDE (CAS 1336-21-6)	STEL	35 ppm
	TWA	25 ppm

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value
AMMONIUM HYDROXIDE (CAS 1336-21-6)	STEL	27 mg/m3
		35 ppm
	TWA	18 mg/m3 25 ppm

US. Workplace Environmental Exposure Level (WEEL) Guides

Components	Type	Value
DIETHYLENE GLYCOL MONOETHYL ETHER (CAS 111-90-0)	TWA	140 mg/m3 25 ppm

Biological limit values	No biological exposure limits noted for the ingredient(s).
Appropriate engineering controls	Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.
Individual protection measures, such as personal protective equipment	
Eye/face protection	Wear safety glasses with side shields (or goggles).
Skin protection	
Hand protection	Wear appropriate chemical resistant gloves.
Other	Wear suitable protective clothing.
Respiratory protection	In case of insufficient ventilation, wear suitable respiratory equipment.
Thermal hazards	Wear appropriate thermal protective clothing, when necessary.
General hygiene considerations	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance	Liquid.
Physical state	Liquid.
Form	Liquid. Emulsion
Color	Opaque white emulsion
Odor	Matches to Standard
Odor threshold	Not available.
pH	Not available.
Melting point/freezing point	14 °F (-10 °C) estimated
Initial boiling point and boiling range	384.8 °F (196 °C) estimated
Flash point	204.8 °F (96.0 °C) estimated
Evaporation rate	Not available.
Flammability (solid, gas)	Not available.
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	0.01 hPa estimated
Vapor density	Not available.
Relative density	Not available.

Solubility(ies)	
Solubility (water)	Not available.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	400 °F (204.44 °C) estimated
Decomposition temperature	Not available.
Viscosity	Not available.
Other information	
Density	8.60 lbs/gal estimated
Flammability class	Combustible IIIB estimated
Percent volatile	79.5 % estimated
pH in aqueous solution	8.6
Pounds per gallon	8.6 lb/gal
Specific gravity	1.03 estimated
VOC (Weight %)	0 % estimated

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Avoid temperatures exceeding the flash point. Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Ingestion	Expected to be a low ingestion hazard.
Inhalation	Prolonged inhalation may be harmful.
Skin contact	No adverse effects due to skin contact are expected.
Eye contact	Direct contact with eyes may cause temporary irritation.

Symptoms related to the physical, chemical and toxicological characteristics Direct contact with eyes may cause temporary irritation.

Information on toxicological effects

Acute toxicity Not available.

Product	Species	Test Results
Appearance 2000 (CAS Mixture)		
Acute		
<i>Dermal</i>		
LD50	Rabbit	158429.9063 mg/kg estimated
<i>Oral</i>		
LD50	Mouse	122.9907 g/kg estimated
	Rabbit	67663.5547 mg/kg estimated
	Rat	25523.3418 mg/kg estimated
<i>Other</i>		
LD50	Mouse	7442.0278 mg/kg estimated
	Rat	41121.4961 mg/kg estimated

* Estimates for product may be based on additional component data not shown.

Skin corrosion/irritation Prolonged skin contact may cause temporary irritation.

Serious eye damage/eye irritation	Direct contact with eyes may cause temporary irritation.
Respiratory or skin sensitization	
Respiratory sensitization	Not available.
Skin sensitization	This product is not expected to cause skin sensitization.
Germ cell mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
Carcinogenicity	This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.
OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)	
	Not listed.
Reproductive toxicity	This product is not expected to cause reproductive or developmental effects.
Specific target organ toxicity - single exposure	Not classified.
Specific target organ toxicity - repeated exposure	Not classified.
Aspiration hazard	Not available.
Chronic effects	Prolonged inhalation may be harmful.
Further information	This product has no known adverse effect on human health.

12. Ecological information

Ecotoxicity The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Product	Species	Test Results	
Appearance 2000 (CAS Mixture)			
Aquatic			
Crustacea	EC50	Daphnia	23125000 mg/l, 48 hours estimated
Fish	LC50	Fish	491.3087 mg/l, 96 hours estimated

* Estimates for product may be based on additional component data not shown.

Persistence and degradability	No data is available on the degradability of this product.
Bioaccumulative potential	No data available.
Partition coefficient n-octanol / water (log Kow)	
DIETHYLENE GLYCOL MONOETHYL ETHER	-0.54
TRIBUTOXYETHYLPHOSPHATE	3.75
Mobility in soil	No data available.
Other adverse effects	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions	Collect and reclaim or dispose in sealed containers at licensed waste disposal site.
Local disposal regulations	Dispose in accordance with all applicable regulations.
Hazardous waste code	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
Waste from residues / unused products	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
Contaminated packaging	Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

14. Transport information

DOT

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code This substance/mixture is not intended to be transported in bulk.

15. Regulatory information

US federal regulations All components are listed or exempted from listing on the U.S. EPA TSCA Inventory List. This product is not known to be a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

AMMONIUM HYDROXIDE (CAS 1336-21-6)	Listed.
DIETHYLENE GLYCOL MONOETHYL ETHER (CAS 111-90-0)	Listed.
TRIBUTOXYETHYLPHOSPHATE (CAS 78-51-3)	Listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - No
 Delayed Hazard - No
 Fire Hazard - No
 Pressure Hazard - No
 Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical No

SARA 313 (TRI reporting)

Chemical name	CAS number	% by wt.
DIETHYLENE GLYCOL MONOETHYL ETHER	111-90-0	5 - < 10

Other federal regulations**Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

DIETHYLENE GLYCOL MONOETHYL ETHER (CAS 111-90-0)
 TRIBUTOXYETHYLPHOSPHATE (CAS 78-51-3)

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA) Not regulated.

US state regulations**US. Massachusetts RTK - Substance List**

AMMONIUM HYDROXIDE (CAS 1336-21-6)

US. New Jersey Worker and Community Right-to-Know Act

AMMONIUM HYDROXIDE (CAS 1336-21-6)
 DIETHYLENE GLYCOL MONOETHYL ETHER (CAS 111-90-0)
 TRIBUTOXYETHYLPHOSPHATE (CAS 78-51-3)

US. Pennsylvania Worker and Community Right-to-Know Law

AMMONIUM HYDROXIDE (CAS 1336-21-6)
 DIETHYLENE GLYCOL MONOETHYL ETHER (CAS 111-90-0)
 TRIBUTOXYETHYLPHOSPHATE (CAS 78-51-3)

US. Rhode Island RTK

AMMONIUM HYDROXIDE (CAS 1336-21-6)
 DIETHYLENE GLYCOL MONOETHYL ETHER (CAS 111-90-0)
 TRIBUTOXYETHYLPHOSPHATE (CAS 78-51-3)

US. California Proposition 65

WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

16. Other information, including date of preparation or last revision

Issue date 10-16-2014

Revision date 01-27-2015

Version # 02

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

Revision Information Composition / Information on Ingredients: Ingredients
Physical & Chemical Properties: Multiple Properties
Toxicological Information: Toxicological Data



SAFETY DATA SHEET

1. Identification

Product identifier **Appearance Admire**

Other means of identification

Product code 9861, 9865, 98655
Recommended use Floor Polish
Recommended restrictions None known.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Company name Fuller Commercial Products
Address One Fuller Way
Great Bend, KS 67530
United States
Telephone Customer Service (800) 810-4829
E-mail Not available.
Emergency phone number CHEMTREC (800) 424-9300
Emergency (620) 792-1711
24 hour Emergency (800) 424-9300

2. Hazard(s) identification

Physical hazards Not classified.

Health hazards Not classified.

Environmental hazards Not classified.

OSHA defined hazards Not classified.

Label elements

Hazard symbol None.

Signal word Warning

Hazard statement May cause mild eye and skin irritation. Harmful to aquatic life.

Precautionary statement

Prevention Avoid release to the environment.

Response Wash hands after handling.

Storage Store away from incompatible materials.

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

Hazard(s) not otherwise classified (HNOC) None known.

Supplemental information % of the mixture consists of component(s) of unknown acute hazards to the aquatic environment.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
DIETHYLENE GLYCOL MONOETHYL ETHER		111-90-0	5 - < 10
TRIBUTYOXYETHYLPHOSPHATE		78-51-3	1 - < 3
AMMONIUM HYDROXIDE		1336-21-6	< 0.2
Other components below reportable levels			90 - 100

This material is not considered to be hazardous according to regulatory guidelines (see Section 15 of the SDS).

4. First-aid measures

Inhalation Move to fresh air. Call a physician if symptoms develop or persist.

Skin contact	Wash off with soap and water. Get medical attention if irritation develops and persists.
Eye contact	Rinse with water. Get medical attention if irritation develops and persists.
Ingestion	Rinse mouth. Get medical attention if symptoms occur.
Most important symptoms/effects, acute and delayed	Direct contact with eyes may cause temporary irritation.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically.
General information	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire-fighting measures

Suitable extinguishing media	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical	During fire, gases hazardous to health may be formed.
Special protective equipment and precautions for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire-fighting equipment/instructions	Move containers from fire area if you can do so without risk.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.
General fire hazards	No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
Methods and materials for containment and cleaning up	Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Prevent entry into waterways, sewer, basements or confined areas. Following product recovery, flush area with water. Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.
Environmental precautions	Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS. Avoid release to the environment. Contact local authorities in case of spillage to drain/aquatic environment. Prevent further leakage or spillage if safe to do so. Do not contaminate water. Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling	Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. Avoid release to the environment. Do not empty into drains.
Conditions for safe storage, including any incompatibilities	Store in original tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value
AMMONIUM HYDROXIDE (CAS 1336-21-6)	PEL	35 mg/m3 50 ppm

US. ACGIH Threshold Limit Values

Components	Type	Value
AMMONIUM HYDROXIDE (CAS 1336-21-6)	STEL	35 ppm
	TWA	25 ppm

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value
AMMONIUM HYDROXIDE (CAS 1336-21-6)	STEL	27 mg/m3
		35 ppm
	TWA	18 mg/m3 25 ppm

US. Workplace Environmental Exposure Level (WEEL) Guides

Components	Type	Value
DIETHYLENE GLYCOL MONOETHYL ETHER (CAS 111-90-0)	TWA	140 mg/m3 25 ppm

Biological limit values	No biological exposure limits noted for the ingredient(s).
Appropriate engineering controls	Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.
Individual protection measures, such as personal protective equipment	
Eye/face protection	Wear safety glasses with side shields (or goggles).
Skin protection	
Hand protection	Wear appropriate chemical resistant gloves.
Other	Wear suitable protective clothing.
Respiratory protection	In case of insufficient ventilation, wear suitable respiratory equipment.
Thermal hazards	Wear appropriate thermal protective clothing, when necessary.
General hygiene considerations	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties**Appearance**

Physical state	Liquid.
Form	Liquid.
Color	Opaque white emulsion
Odor	Not available.
Odor threshold	Not available.
pH	8.6
Melting point/freezing point	32 °F (0 °C)
Initial boiling point and boiling range	212 °F (100 °C)
Flash point	204.8 °F (96.0 °C) estimated
Evaporation rate	Not available.
Flammability (solid, gas)	Not available.

Upper/lower flammability or explosive limits

Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Explosive limit - lower (%)	Not available.

Explosive limit - upper (%)	Not available.
Vapor pressure	0.01 hPa estimated
Vapor density	Not available.
Relative density	Not available.
Solubility(ies)	
Solubility (water)	Not available.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	400 °F (204.44 °C) estimated
Decomposition temperature	Not available.
Viscosity	Not available.
Other information	
Density	8.59 lbs/gal
Flammability class	Combustible IIIB estimated
Percent volatile	80.5 %
Specific gravity	1.03
VOC (Weight %)	0 %

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Avoid temperatures exceeding the flash point. Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Ingestion	Expected to be a low ingestion hazard.
Inhalation	Prolonged inhalation may be harmful.
Skin contact	No adverse effects due to skin contact are expected.
Eye contact	Direct contact with eyes may cause temporary irritation.
Symptoms related to the physical, chemical and toxicological characteristics	Direct contact with eyes may cause temporary irritation.

Information on toxicological effects

Acute toxicity Not available.

Product	Species	Test Results
Appearance Admire (CAS Mixture)		
Acute		
<i>Dermal</i>		
LD50	Mouse	112149.5313 mg/kg estimated
	Rabbit	158429.9063 mg/kg estimated
	Rat	112149.5313 mg/kg estimated
<i>Oral</i>		
LD50	Mouse	122.9907 g/kg estimated
	Rat	20323.7832 mg/kg estimated
<i>Other</i>		
LD50	Mouse	7728.7007 mg/kg estimated

Product	Species	Test Results
	Rat	41121.4961 mg/kg estimated

* Estimates for product may be based on additional component data not shown.

Skin corrosion/irritation	Prolonged skin contact may cause temporary irritation.
Serious eye damage/eye irritation	Direct contact with eyes may cause temporary irritation.
Respiratory or skin sensitization	
Respiratory sensitization	Not available.
Skin sensitization	This product is not expected to cause skin sensitization.
Germ cell mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
Carcinogenicity	This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.
OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)	
	Not listed.
Reproductive toxicity	This product is not expected to cause reproductive or developmental effects.
Specific target organ toxicity - single exposure	Not classified.
Specific target organ toxicity - repeated exposure	Not classified.
Aspiration hazard	Not available.
Chronic effects	Prolonged inhalation may be harmful.

12. Ecological information

Ecotoxicity	Harmful to aquatic life.		
	Product	Species	Test Results
	Appearance Admire (CAS Mixture)		
	Aquatic		
	Crustacea	EC50	Daphnia
			143108.8594 mg/l, 48 hours estimated
	Fish	LC50	Fish
			458.5973 mg/l, 96 hours estimated

* Estimates for product may be based on additional component data not shown.

Persistence and degradability	No data is available on the degradability of this product.		
Bioaccumulative potential	No data available.		
	Partition coefficient n-octanol / water (log Kow)		
	DIETHYLENE GLYCOL MONOETHYL ETHER		-0.54
	TRIBUTOXYETHYLPHOSPHATE		3.75
Mobility in soil	No data available.		
Other adverse effects	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.		

13. Disposal considerations

Disposal instructions	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.
Local disposal regulations	Dispose in accordance with all applicable regulations.
Hazardous waste code	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
Waste from residues / unused products	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
Contaminated packaging	Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

14. Transport information

DOT

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code This substance/mixture is not intended to be transported in bulk.

15. Regulatory information

US federal regulations This product is not known to be a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
All components are on the U.S. EPA TSCA Inventory List.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

AMMONIUM HYDROXIDE (CAS 1336-21-6)	Listed.
DIETHYLENE GLYCOL MONOETHYL ETHER (CAS 111-90-0)	Listed.
TRIBUTOXYETHYLPHOSPHATE (CAS 78-51-3)	Listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - No
Delayed Hazard - No
Fire Hazard - No
Pressure Hazard - No
Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical No

SARA 313 (TRI reporting)

Chemical name	CAS number	% by wt.
DIETHYLENE GLYCOL MONOETHYL ETHER	111-90-0	5 - < 10

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

DIETHYLENE GLYCOL MONOETHYL ETHER (CAS 111-90-0)
TRIBUTOXYETHYLPHOSPHATE (CAS 78-51-3)

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA) Not regulated.

US state regulations

US. Massachusetts RTK - Substance List

AMMONIUM HYDROXIDE (CAS 1336-21-6)

US. New Jersey Worker and Community Right-to-Know Act

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TRIBUTOXYETHYLPHOSPHATE (CAS 78-51-3)

US. Rhode Island RTK

AMMONIUM HYDROXIDE (CAS 1336-21-6)

DIETHYLENE GLYCOL MONOETHYL ETHER (CAS 111-90-0)

TRIBUTOXYETHYLPHOSPHATE (CAS 78-51-3)

US. California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

16. Other information, including date of preparation or last revision

Issue date 06-25-2014

Revision date 02-05-2015

Version # 02

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

Revision Information Hazard(s) identification: Hazard statement
Toxicological Information: Toxicological Data

SAFETY DATA SHEET

6/8/2015

SECTION I - IDENTIFICATION

Material Name
APPLE BARREL

Manufacturer Information
Plaid Enterprises, Inc.
3225 Westech Drive
Norcross, Georgia 30092
Phone: 1-678-291-8213
Fax: 1-678-291-8363
Email: jstanley@plaidonline.com

For transportation emergencies only call: cell: 770-778-3221
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 INGREDIENTS

<u>Ingredient</u>	<u>CAS/EC #</u>	<u>PEL/TLV (MG/M#)</u>	<u>Max % Weight</u>	<u>NTP</u>	<u>IARC</u>
None					

SECTION IV - FIRST AID MEASURES

FIRST AID MEASURES: NONE REQUIRED. NO ACUTE HEALTH EFFECTS EXPECTED.

SECTION V - FIRE FIGHTING MEASURES

FLASH POINT (METHOD): N/A
EXPLOSION LIMITS IN AIR (% BY VOLUME): NOT EXPLOSIVE
EXTINGUISHING MEDIA: NO SPECIAL MEDIA REQUIRED
FIRE FIGHTING PROCEDURES: NO SPECIAL FIRE FIGHTING PROCEDURES REQUIRED
UNUSUAL FIRE & EXPLOSION HAZARDS: NOT COMBUSTIBLE

AUTOIGNITION TEMPERATURE: N/A

SECTION VI - ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE A MATERIAL IS SPILLED: Clean up in accordance with all applicable regulations. Absorb spillage with non-combustible, absorbent material. For waste disposal, see Section XIII

SECTION VII - HANDLING AND STORAGE

PRECAUTIONS TO BE TAKEN DURING STORAGE AND HANDLING: Good industrial hygiene practice requires that exposure be maintained below the TLV. This is preferably achieved through the provision of adequate ventilation. When exposure cannot be adequately controlled in this way, personal respiratory protection should be employed.

SECTION VIII - EXPOSURE CONTROLS / PERSONAL PROTECTION

RESPIRATORY PROTECTION AND SPECIAL VENTILATION REQUIREMENTS: NONE REQUIRED
OTHER PROTECTIVE EQUIPMENT (GLOVES, GOGGLES, ETC): NONE REQUIRED
WORK/HYGIENE PRACTICES: NONE REQUIRED
ENGINEERING CONTROLS: NONE REQUIRED

SECTION IX - PHYSICAL AND CHEMICAL PROPERTIES

BOILING POINT: N/A
VAPOR PRESSURE: N/A
SPECIFIC VAPOR DENSITY (AIR=1): N/A
SOLUBILITY IN WATER: N/A

MELTING POINT: N/A

SPECIFIC GRAVITY: N/A
REACTIVITY IN WATER: NON-REACTIVE

SECTION X - STABILITY AND REACTIVITY

HAZARDOUS POLYMERIZATION PRODUCTS: 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 13762 mg/kg.
The summated LC50 is 26664 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):
ALUMINUM
IODOPROPYNYL BUTYL CARBAMATE

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:

ALUMINUM
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:

AMMONIUM HYDROXIDE
CHROMIUM OXIDE GREEN
MICA
PIGMENT RED 101
PIGMENT WHITE 6

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

Under CPSC's consumer product regulations (16CFR1500.3 and 150014), this product has the following required acute and chronic hazard labeling:

NONE

SECTION XVI - OTHER INFORMATION

LAST REVISION DATE: 06/08/2015

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
20203 LT. PEACH		(NONE)
20204 WILD BERRY		(NONE)
20205 HOT PINK		(NONE)
20206 LT. ORCHID		(NONE)
20207 RED VIOLET		(NONE)
20209 LT. PERIWINKLE		(NONE)
20210 TURQUOISE		(NONE)
20211 LT. LEAF GREEN		(NONE)
20215 BUBBLE GUM		(NONE)
20216 FUCHSIA		(NONE)
20217 GERANIUM RED		(NONE)
20218 MANGO		(NONE)
20219 BANANA		(NONE)
20220 GREEN APPLE		(NONE)
20221 KIWI		(NONE)
20222 SEA GREEN		(NONE)
20223 POOL BLUE		(NONE)
20224 CAROLINA BLUE		(NONE)
20225 BRIGHT BLUE		(NONE)
20226 PETUNIA PURPLE		(NONE)
20227 BLUE IRIS		(NONE)
20240 FORGET ME NOT		(NONE)
20241 IT'S A BOY		(NONE)
20242 IT'S A GIRL		(NONE)
20243 PRETTY IN PINK		(NONE)
20244 HONEYSUCKLE		(NONE)
20245 LAVENDER SHERBERT		(NONE)
20246 PLUM KISS		(NONE)
20247 CARRIBEAN		(NONE)
20251 PINK PARFAIT		(NONE)
20253 LIMEADE		(NONE)
20254 DIVA PINK		(NONE)
20258 MELTED CHOCOLATE		(NONE)
20501 BRIGHT RED		(NONE)
20502 YELLOW		(NONE)
20503 WHITE		(NONE)
20504 BLACK		(NONE)
20505 ANTIQUE WHITE		(NONE)
20506 ANTIQUE GOLD		(NONE)
20507 AVOCADO		(NONE)
20509 ENGLISH LACE		(NONE)
20511 BROWN OXIDE		(NONE)
20512 BURNT UMBER		(NONE)
20513 BRIGHT YELLOW		(NONE)
20514 FLESH		(NONE)
20515 BURNT SIENNA		(NONE)
20516 IVORY		(NONE)
20517 GALAXY BLUE		(NONE)
20519 CLAY BRICK		(NONE)
20520 LAVENDER		(NONE)
20521 NUTMEG BROWN		(NONE)
20522 DUTCH BLUE		(NONE)
20523 KELLY GREEN		(NONE)
20524 GOLDEN BROWN		(NONE)
20525 BERRY RED		(NONE)
20526 COUNTRY GREY		(NONE)
20528 LEAF GREEN		(NONE)

Product Color	SKU	Hazardous Ingredient
20529 CHRISTMAS GREEN		(NONE)
20530 WEDGEWOOD GREEN		(NONE)
20531 TERRA COTTA		(NONE)
20532 MAROON		(NONE)
20533 CRIMSON		(NONE)
20534 STRAW		(NONE)
20535 LIGHT PINK		(NONE)
20536 PARCHMENT		(NONE)
20538 FOREST GREEN		(NONE)
20539 GEORGIA CLAY		(NONE)
20540 REAL SPICE		(NONE)
20541 WOODLAND GREEN		(NONE)
20542 PINEAPPLE		(NONE)
20543 BUTTERCUP		(NONE)
20544 DEEP SEA BLUE		(NONE)
20545 SCOTCH BLUE		(NONE)
20546 INDIAN RED		(NONE)
20547 TAN		(NONE)
20548 VIKING BLUE		(NONE)
20549 MIDNIGHT BLUE		(NONE)
20552 ROCK GREY		(NONE)
20553 BOSTON BLUE		(NONE)
20554 BLUE MIST		(NONE)
20555 BURGANDY ROSE		(NONE)
20556 MEDIUM FLESH		(NONE)
20558 TERRITORIAL BEIGE		(NONE)
20559 LILAC DUST		(NONE)
20560 DUSTY MAUVE		(NONE)
20561 ORANGE		(NONE)
20562 LAGUNA		(NONE)
20563 LIBERTY BLUE		(NONE)
20564 DARK NIGHT		(NONE)
20565 POWDER BLUE		(NONE)
20566 BLUE STONEWARE		(NONE)
20567 MILITARY BLUE		(NONE)
20568 SAGE GREEN		(NONE)
20569 SALEM GREEN		(NONE)
20570 ROSE BOUQUET		(NONE)
20571 APPLE PINK		(NONE)
20572 INDIANA ROSE		(NONE)
20573 VICTORIA ROSE		(NONE)
20574 ENGLISH ROSE		(NONE)
20575 SANDSTONE		(NONE)
20576 TOFFEE		(NONE)
20577 BARN RED		(NONE)
20578 CHOCOLATE BAR		(NONE)
20579 IRON GREY		(NONE)
20580 PEWTER GREY		(NONE)
20581 FRESH APRICOT		(NONE)
20582 CREAMY PEACH		(NONE)
20583 VICTORIAN GREEN		(NONE)
20584 LEMON CHIFFON		(NONE)
20585 SATIN CREAM		(NONE)
20586 CANARY YELLOW		(NONE)
20587 SPRING GREEN		(NONE)
20588 PUMPKIN ORANGE		(NONE)
20589 HARVEST ORANGE		(NONE)
20590 CARDINAL CRIMSON		(NONE)
20591 BRIGHT MAGENTA		(NONE)
20592 TAPESTRY WINE		(NONE)
20593 WILD IRIS		(NONE)
20594 ROYAL VIOLET		(NONE)
20595 CONCORD GRAPE		(NONE)
20596 COBALT BLUE		(NONE)
20597 TRUE NAVY		(NONE)
20740 PARAKEET		(NONE)

Product Color	SKU	Hazardous Ingredient
20741 CLOUDLESS		(NONE)
20751 REGENCY BLUE		(NONE)
20752 MYSTIC TEAL		(NONE)
20753 VIRIDIAN GREEN		(NONE)
20754 HUNTER GREEN		(NONE)
20755 VINEYARD GREEN		(NONE)
20756 ENGLISH IVY GREEN		(NONE)
20757 MEADOW GREEN		(NONE)
20758 AZEALA BLUSH		(NONE)
20759 POPPY RED		(NONE)
20760 KING'S GOLD		(NONE)
20761 PURE GOLD		(NONE)
20762 PURE SILVER		(NONE)
20763 PURE BRONZE		(NONE)
20764 APRICOT		(NONE)
20765 CINNAMON APPLE		(NONE)
20766 CRANBERRY		(NONE)
20767 VALENTINE PINK		(NONE)
20768 PETAL PINK		(NONE)
20769 PERIWINKLE BLUE		(NONE)
20770 SKY BLUE		(NONE)
20771 TOO BLUE		(NONE)
20772 NIGHT SKY		(NONE)
20773 ENGLISH NAVY		(NONE)
20774 AQUAMARINE		(NONE)
20775 TRUE TEAL		(NONE)
20776 GREEN CLOVER		(NONE)
20777 GOOSE FEATHER		(NONE)
20778 COUNTRY TAN		(NONE)
20779 CARAMEL CANDY		(NONE)
20780 TWILL		(NONE)
20781 DOLPIN GRAY		(NONE)
20782 MISTY WHITE		(NONE)
20783 PASTEL PINK		(NONE)
20784 RED APPLE		(NONE)
20785 BURGUNDY		(NONE)
20786 LAVENDER LACE		(NONE)
20791 VICTORIAN RED		(NONE)
20881 MANDARIN ORANGE		(NONE)
20882 SUNLIGHT		(NONE)
20883 PRACTICALLY GREEN		(NONE)
20884 SPINNAKER BLUE		(NONE)
20885 LULLABY LAVENDER		(NONE)
21051 PAPA YA		(NONE)
21170 WHITE		(NONE)
21171 BLACK		(NONE)
21176 GRAPE JAM		(NONE)
21177 SUMMER SUNSET		(NONE)
21178 BLUEBERRY		(NONE)
21179 HAYSTACK		(NONE)
21180 STRAWBERRY		(NONE)
21181 ORANGE SHERBERT		(NONE)
21185 PARROT BLUE		(NONE)
21186 GOLDEN SUNSET		(NONE)
21337 PIGGY PINK		(NONE)
21337 SNOWFLAKE		(NONE)
21338 PUNK PINK		(NONE)
21339 PRETTY IN PINK		(NONE)
21340 CORAL		(NONE)
21341 TROPIC ORANGE		(NONE)
21342 CATERPILLAR		(NONE)
21343 LIGHT IVY GREEN		(NONE)
21344 CAMOUFLAGE		(NONE)
21345 DARK FOREST GREEN		(NONE)
21346 PALE GREEN		(NONE)
21347 WINTERGREEN		(NONE)

Product Color	SKU	Hazardous Ingredient
21348 REEF BLUE		(NONE)
21349 CRYSTAL BLUE		(NONE)
21376 DOGWOOD BLOSSOM		(NONE)
21377 SNOWFLAKE		(NONE)
21378 VANILLA ICE CREAM		(NONE)
21379 PINK POLISH		(NONE)
21380 CRANBERRY		(NONE)
21381 SWEET POTATO		(NONE)
21384 SUNNY DAY		(NONE)
21386 ARBOR GREEN		(NONE)
21388 LILAC MIST		(NONE)
21389 ECRU		(NONE)
21390 KHAKI		(NONE)
21391 CHESTNUT		(NONE)
21392 GRANITE GRAY		(NONE)
21463 ANTIQUE PARCHMENT		(NONE)
21464 CAMEO PINK		(NONE)
21465 CANDY PINK		(NONE)
21466 HONEYSUCKLE PINK		(NONE)
21467 TUSCAN RED		(NONE)
21468 FLAMENCO RED		(NONE)
21469 FLAG RED		(NONE)
21470 RIPE TOMATO		(NONE)
21471 SPICED CARROT		(NONE)
21472 JACK-O-LANTERN		(NONE)
21473 PALE DAFFODIL		(NONE)
21474 YELLOW FLAME		(NONE)
21475 LIME FLOAT		(NONE)
21476 LIME TREE		(NONE)
21477 PALM LEAF		(NONE)
21478 HOLLY BRANCH		(NONE)
21479 NEW SHAMROCK		(NONE)
21480 LIME SHERBERT		(NONE)
21481 KEY WEST		(NONE)
21482 BIMINI BLUE		(NONE)
21483 CHINA BLUE		(NONE)
21484 ADMIRAL BLUE		(NONE)
21485 BLUE BONNET		(NONE)
21486 PURPLE IRIS		(NONE)
21487 VELVET CRUSH		(NONE)
21488 PURPLE PANSY		(NONE)
21489 LITE MOCA		(NONE)
21490 PAVEMENT		(NONE)
21884 SNOW WHITE		(NONE)
21885 JET BLACK		(NONE)
21886 BLUE COTTON		(NONE)
21887 TUSCAN TEAL		(NONE)
21888 SUNKISSED PEACH		(NONE)
21889 PINK ERASER		(NONE)
21890 CRISP GREEN		(NONE)
21891 MARSH GREEN		(NONE)
21892 AWARD BLUE		(NONE)
21893 LAVENDER SACHET		(NONE)
21894 MOSAIC BLUE		(NONE)
2850 NEON PINK		(NONE)
2852 NEON ORANGE		(NONE)
2853 NEON YELLOW		(NONE)
2871 GLOW IN THE DARK PINK		(NONE)
2872 GLOW IN THE DARK ORANGE		(NONE)
2873 GLOW IN THE DARK YELLOW		(NONE)
2874 GLOW IN THE DARK GREEN		(NONE)
29884 SPINNAKER BLUE		(NONE)
29885 LULLABY LAVENDER		(NONE)
72004 BRIGHT MAGENTA		(NONE)
72035 GOLD		(NONE)
K20840 LT. YELLOW		(NONE)

Product Color	SKU	Hazardous Ingredient
K20841 INDIAN ROSE		(NONE)
K20842 ENGLISH ROSE		(NONE)
K20843 POPPY RED		(NONE)
K20844 AZALEA BLUSH		(NONE)
K20845 TERRA COTTA		(NONE)
K20846 LT. LEAF GREEN		(NONE)
K20847 PIKE GREEN		(NONE)
K20848 BABY BLUE		(NONE)
K20849 NIGHT SKY		(NONE)

BRAND NAMES

THIS SDS APPLIES TO THE FOLLOWING BRAND NAMES

Brand Name	SKU
APPLE BARREL	

Safety Data Sheet
OSHA Hazard Communication Standard
29 CFR 1910.1200. Prepared to GHS Rev 3.



Revision
date: 08.11.2016

Date of issue: 06.07.2015

Page: 1/10

Trade name:	Aqua-Gel® II Utility Cable Pulling Lubricant
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SECTION 1: Identification

Product identifier: Aqua-Gel® II Utility Cable Pulling Lubricant.
Synonyms: None available.
Product Code Number: 31-371(G), 31-375(G), 31-378(G), 31-3855.
SDS number: ID001
Recommended use: Wire Pulling Lubricant.
Recommended restrictions: None known.

Manufacturer/Importer/Supplier/Distributor information:

Company Name: IDEAL INDUSTRIES, INC.
Company Address: Becker Place,
Sycamore, IL 60178
Company Telephone: Office hours (Mon – Fri)
7AM - 5 PM (CDT)
(815)895-5181
Company Contact Name: Darryl Docter.
Company Contact Email: IDEAL@IDEALINDUSTRIES.COM
Emergency phone number: 24 HOUR EMERGENCY NUMBER:
(815)895-5181.

SECTION 2: Hazard(s) identification

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

Physical hazards

Not classified as a physical hazard under GHS criteria

Health hazards

Not classified as a health hazard under GHS criteria

Environmental hazards

Not classified as a physical hazard under GHS criteria.

GHS Signal word: Not applicable.

GHS Hazard statement(s): Not applicable.

GHS Hazard symbol(s): Not applicable.

GHS Precautionary statement(s):

Prevention:

No prevention precautionary statements required.

Response:

No response precautionary statements required

Storage:

No storage precautionary statements required.

Disposal:

No disposal precautionary statements required.

Hazard(s) not otherwise

Classified (HNOC): None known.

Percentage of ingredient(s) of unknown acute toxicity:

Not applicable.

SECTION 3: Composition/information on ingredients

Mixture:

Chemical name	CAS#	Concentration (weight %)
Potassium Hydroxide (20% solution)	1310-58-3	< 2%

Note: The balance of the ingredients are not classified as hazardous or below the threshold concentration, under the criteria of the Federal OSHA Hazard Communication Standard 29CFR 1910.1200.

SECTION 4: First-aid Measures

Description of necessary measures:

Inhalation: Obtain medical attention if there are signs of breathing difficulties.

Skin contact: Wash with plenty of soap and water. Remove contaminated clothing and thoroughly clean before reuse.

Eye contact: Flush eyes with water for at least 15 minutes, occasionally lifting eyelids. If pain or redness persists after flushing, obtain medical attention.

Ingestion: Do not induce vomiting. Consult physician or local poison control center.

Most important symptoms/effects, acute and delayed: None expected.

Indication of immediate medical attention and special treatment needed: If any symptoms are observed, contact a physician and give them this SDS sheet. If exposed or concerned: Get medical advice/attention.

SECTION 5: Fire-fighting measures

Suitable extinguishing media: Not flammable. Use extinguishing media suitable for surrounding materials.

Unsuitable extinguishing media: No data available.

Specific hazards arising from the chemical: Extreme temperatures of combustion or burning and contact with nitrites could result in the formation of nitrosamines which are potential carcinogens. This condition is unlikely to occur.

Combustion products - Carbon monoxide, Carbon dioxide.

Special protective equipment and precautions for fire-fighters: For fire involving this material, do not enter any enclosed or confined fire space without proper protective equipment. This may include self-contained breathing apparatus to protect against the hazardous effects of combustion products and oxygen deficiencies.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures: Stay upwind and away from spill/release. For large spillages, notify persons downwind of the spill/release, isolate immediate hazard area and keep unauthorized personnel out. Wear appropriate protective equipment, including respiratory protection, as conditions warrant (see Section 8). See Sections 2 and 7 for additional information on hazards and precautionary measures.

Methods and material for containment and cleaning up:

Persons not wearing protective equipment should be excluded from area of spill until cleanup has been completed. Stop spill at source, wipe up, shovel or vacuum spilled material. Clean up spills immediately as they can be dangerously slippery. Prevent run-off to sewers, streams or other bodies of water. If run-off occurs, notify proper authorities as required.

SECTION 7: Handling and Storage

Precautions for safe handling: Wash thoroughly after handling. Wear protective gloves/clothing and eye/face protection. Use good personal hygiene practices and wear appropriate personal protective equipment (see section 8).

Conditions for safe storage, including any incompatibles: Store at temperatures between 40 - 180°F. Avoid freezing. Keep away from children, infants and pets. Keep container(s) tightly closed and properly labeled. Store only in approved containers. Keep away from any incompatible material (see Section 10). Protect container(s) against physical damage.

"Empty" containers retain residue and may be dangerous. "Empty" drums should be completely drained, properly bunged, and promptly shipped to the supplier or a drum reconditioner. All containers should be disposed of in an environmentally safe manner and in accordance with governmental regulations.

SECTION 8: Exposure controls/personal protection

Control Parameters:

Occupational exposure limits:

US OSHA HAZARDOUS COMPONENTS (29 CFR 1910.1200): Permissible Exposure Limits		
Substance	PEL-TWA (8 hour)	PEL-STEEL (15 min)
Potassium Hydroxide	No data available	No data available

US ACGIH Threshold Limit Values		
Substance	TLV-TWA (8 hour)	TLV-STEEL (15 min)
Potassium Hydroxide	2 mg/m ³ Ceiling	No data available

NIOSH Exposure Limits		
Substance	TWA	STEEL
Potassium Hydroxide	2 mg/m ³ Ceiling	No data available

Appropriate engineering controls: General (mechanical) room ventilation is expected to be adequate. Special local ventilation is suggested at points where vapors can be expected to escape to the workplace air or in enclosed areas.

Individual protection measures, such as personal protective equipment:

Eye/face protection: None normally required, but the use of OSHA compliant safety glasses or splash goggles recommended.

Skin and Hand protection: None normally needed -Neoprene if necessary. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Respiratory protection: None normally required.

Other: Eye wash / eye bath in the work area is recommended but not necessary.

Thermal hazards: No data available.

SECTION 9: Physical and chemical properties

Appearance

Physical state:	Gel
Form:	Clear gel.
Color:	Blue.
Odor:	Mild odor.
Odor threshold:	No data available
pH:	6.5 – 8.0
Melting point/freezing point:	No data available
Initial boiling point and boiling range:	100°C (212°F)
Flash point:	None
Evaporation rate:	No data available
Flammability (solid, gas):	Not applicable
Upper/lower flammability or explosive limits	
Flammability limit – lower (%):	No data available
Flammability limit – upper (%):	No data available
Explosive limit – lower (%):	No data available
Explosive limit – upper (%):	No data available
Vapor pressure:	No data available
Vapor density:	No data available
Relative Density:	0.9930-1.0330
Solubility(ies):	Infinite.
Partition coefficient (n-octanol/water):	No data available
Auto-ignition temperature:	No data available
Decomposition temperature:	No data available
Viscosity:	20000-40000 cps

Other information:

% Volatile by volume:	< 90%
Percent solids by weight:	~10

SECTION 10: Stability and Reactivity

Reactivity:	Not chemically reactive.
Chemical stability:	Stable under normal ambient and anticipated conditions of use.
Possibility of hazardous reactions:	Hazardous reactions not anticipated.
Conditions to avoid:	Avoid prolonged storage at temperatures exceeding 190°F. Extreme temperatures of combustion or burning and contact with nitrites could result in the formation of nitrosamines which are potential carcinogens. This condition is unlikely to occur.
Incompatible materials:	Avoid contact with strong oxidizers and nitrites.

Hazardous decomposition Products: In the unlikely event of combustion of dried residue, oxides and nitrogen may be released.

SECTION 11: Toxicological information

Information on likely routes of exposure:

Inhalation: Not an expected route of entry.
Ingestion: Not an expected route of entry.
Skin: Not an expected route of entry.
Eyes: Not an expected route of entry.

Symptoms related to the physical, chemical, and toxicological characteristics:
None expected.

Delayed and immediate effects and chronic effects from short or long-term exposure:
Detailed below.

Numerical measures of toxicity:
Ingredient Information:

Substance	Test Type (species)	Value
Potassium hydroxide	LD ₅₀ Oral (Rat)	273 mg/kg
	LD ₅₀ Dermal (Rabbit)	No data available
	LC ₅₀ Inhalation (Rat)	No data available

Product Acute Toxicity Estimates:

Acute Oral Toxicity – no data available
Acute Dermal Toxicity - no data available
Acute Inhalation Toxicity - no data available

Skin corrosion/irritation: Not expected to cause skin corrosion or irritation.

Serious eye damage/eye irritation: Not expected to cause eye damage / irritation.

Respiratory sensitization: No information available on the mixture, however none of the components have been classified as a respiratory sensitizer (or are below the concentration threshold for classification).

Skin sensitization: No information available on the mixture, however none of the components have been classified as a skin sensitizer (or are below the concentration threshold for classification).

Germ cell mutagenicity: No information available on the mixture, however none of the components have been classified for

germ cell mutagenicity (or are below the concentration threshold for classification).

Carcinogenicity:

No information available on the mixture, however none of the components are listed in the National Toxicology Program (NTP) Report on Carcinogens (latest edition) or has been found to be a potential carcinogen in the International Agency for Research on Cancer (IARC) Monographs (latest edition), or by OSHA.

Reproductive toxicity:

No information available on the mixture, however none of the components have been classified for reproductive toxicity (or are below the concentration threshold for classification).

**Specific target organ toxicity-
 Single exposure:**

No information available on the mixture, however none of the components have been classified for STOT SE (or are below the concentration threshold for classification).

**Specific target organ toxicity-
 Repeat exposure:**

No information available on the mixture, however none of the components have been classified for STOT RE (or are below the concentration threshold for classification).

Aspiration hazard:

No information available on the mixture, however none of the components have been classified for aspiration hazard (or are below the concentration threshold for classification).

Further information:

No data available.

SECTION 12: Ecological information

Ecotoxicity:

Product data: No data available

Ingredient Information:

Substance	Test Type	Species	Value
Potassium hydroxide	LC ₅₀	Fish - Gambusia affinis (Mosquito fish)	85 mg/l (24h)

	LC ₅₀	Aquatic crustacea	No data available
	EC ₅₀	Algae	No data available

Persistence and Degradability: No data available

Bioaccumulative Potential: No data available.

Mobility in Soil: No data available.

Other adverse effects: No data available.

SECTION 13: Disposal considerations

Disposal instructions:

The generator of a waste is always responsible for making proper hazardous waste determinations and needs to consider state and local requirements in addition to federal regulations.

See Sections 7 and 8 for information on handling, storage and personal protection and Section 9 for physical/chemical properties. It is possible that the material as produced contains constituents which are not required to be listed in the SDS but could affect the hazardous waste determination. Additionally, use which results in chemical or physical change of this material could subject it to regulation as a hazardous waste.

SECTION 14: Transport Information

DOT: This material is not classified as dangerous under DOT regulations.

IATA: This material is not classified as dangerous under IATA regulations.

IMDG: This material is not classified as dangerous under IMDG regulations.

SECTION 15: Regulatory Information

Safety, health and environmental regulations specific for the product.

USA:

United States Federal Regulations: This SDS complies with the OSHA, 29 CFR 1910.1200. The product is hazardous under OSHA.

Toxic Substances Control Act (TSCA) – All substances in this product are listed, as required, on the TSCA inventory.

SARA Superfund and Reauthorization Act of 1986 Title III sections 302, 311,312 and 313:

Section 302 – No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

CERCLA Hazardous Substance List, 40 CFR 302.4:

Component	Reportable Quantity
Potassium Hydroxide	1000 lbs

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130):
None listed.

Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3): None listed.

SARA Title III

Section 302 Extremely Hazardous Substance (40 CFR 355, Appendix A): None listed.

Section 311/312 (40 CFR 370):

Acute Health Hazard: No

Chronic Health Hazard: No

Fire Hazard: No

Pressure Hazard: No

Reactivity Hazard: No

Section 313 Toxic Release Inventory (40 CFR 372):

None

STATE REGULATIONS:

This SDS contains specific health and safety data is applicable for state requirements. For details on your regulatory requirements you should contact the appropriate agency in your state.

California Proposition 65 (California Safe Drinking Water and Toxic Enforcement Act of 1986): No components are listed on Prop 65.

Massachusetts Right to Know: Potassium hydroxide is listed on the Massachusetts Right to Know List.

Minnesota Hazardous Substance List: None of the components are listed on the Minnesota Hazardous Substance List.

New Jersey Right to Know: Potassium hydroxide is listed on the New Jersey Right to Know list.

Pennsylvania Right to Know: Potassium hydroxide is listed on the Pennsylvania Right to Know List.

Canada WHMIS Hazard Class: Not classified.

SECTION 16: Other information, including date of preparation or last revision.

Revision Date: June 07, 2015

To the best of our knowledge, the information contained herein is accurate. However IDEAL INDUSTRIES INC. does not assume any liability whatsoever 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 hazards which exist.

SAFETY DATA SHEET

SECTION 1. IDENTIFICATION OF THE SUBSTANCE OR MIXTURE AND OF THE SUPPLIER

PRODUCT IDENTITY: AQUASEAL FOR LEATHER – CREME
PRODUCT SYNONYMS: None
PRODUCT USES: Leather conditioner

COMPANY IDENTITY: Trondak, Inc.
COMPANY ADDRESS: 17631 147th St, #7
COMPANY CITY: Monroe, WA 98278
COMPANY PHONE: 360-794-8250
EMERGENCY PHONE: 360-794-8250

SECTION 2. HAZARDS IDENTIFICATION

This material is hazardous according to regulatory guidelines (see (M)SDS Section 15).

CLASSIFICATION:

Flammable liquid: Category 4.
Aspiration toxicant: Category 1.

LABEL:

Pictogram:



Signal Word: Danger

Hazard Statements:

H227: Combustible liquid. H304: May be fatal if swallowed and enters airways.

Precautionary Statements:

P210: Keep away from flames and hot surfaces. -- No smoking. P280: Wear protective gloves and eye / face protection. P301 + P310: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. P331: Do NOT induce vomiting. P370 + P378: In case of fire: Use water fog, foam, dry chemical or carbon dioxide (CO₂) to extinguish. P403 + P235: Store in a well-ventilated place. Keep cool. P405: Store locked up. P501: Dispose of contents and container in accordance with local regulations.

Contains: NAPHTHA (PETROLEUM), HYDROTREATED HEAVY

Other hazard information:

HAZARD NOT OTHERWISE CLASSIFIED (HNOC): None as defined under 29 CFR 1910.1200.

PHYSICAL / CHEMICAL HAZARDS

Material can accumulate static charges which may cause an ignition. Material can release vapors that readily form flammable mixtures. Vapor accumulation could flash and/or explode if ignited. Combustible.

HEALTH HAZARDS

Repeated exposure may cause skin dryness or cracking. May be irritating to the eyes, nose, throat, and lungs.

ENVIRONMENTAL HAZARDS

No significant hazards.

NFPA Hazard ID: Health: 1 Flammability: 2 Reactivity: 0
HMIS Hazard ID: Health: 1* Flammability: 2 Reactivity: 0

NOTE: This material should not be used for any other purpose than the intended use in Section 1 without expert advice. Health studies have shown that chemical exposure may cause potential human health risks which may vary from person to person.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

MATERIAL	CAS#	EINECS#	WT %
Hydrotreated Heavy Naphtha	64742-47-8	265-200-4	45-55
Process Oil	64742-54-7		
and/or	64742-55-8	-	15-25
Hydrotreated Light Distillates	64742-48-9	265-191-7	5-15
Non-Hazardous Ingredients	Mixture		15-25

Proprietary Formula

The specific chemical component identities and/or the exact component percentages of this material may be withheld as trade secrets. This information is made available to health professionals, employees, and designated representatives in accordance with the applicable provisions of 29 CFR 1910.1200 (I)(1).

SECTION 4. FIRST AID MEASURES

INHALATION

Remove from further exposure. For those providing assistance, avoid exposure to yourself or others. Use adequate respiratory protection. If respiratory irritation, dizziness, nausea, or unconsciousness occurs, seek immediate medical assistance. If breathing has stopped, assist ventilation with a mechanical device or use mouth-to-mouth resuscitation.

SKIN CONTACT

Wash contact areas with soap and water. Remove contaminated clothing. Launder contaminated clothing before reuse.

EYE CONTACT

Flush thoroughly with water. If irritation occurs, get medical assistance.

INGESTION

Seek immediate medical attention. Do not induce vomiting.

NOTE TO PHYSICIAN

If ingested, material may be aspirated into the lungs and cause chemical pneumonitis. Treat appropriately.

SECTION 5. FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA

Appropriate Extinguishing Media: Use water fog, foam, dry chemical or carbon dioxide (CO2) to extinguish flames.

Inappropriate Extinguishing Media: Straight Streams of Water

FIRE FIGHTING

Fire Fighting Instructions: Evacuate area. Prevent runoff from fire control or dilution from entering streams, sewers, or drinking water supply. Firefighters should use standard protective equipment and in enclosed spaces, self-contained breathing apparatus (SCBA). Use water spray to cool fire exposed surfaces and to protect personnel.

Unusual Fire Hazards: Combustible.

Hazardous Combustion Products: Incomplete combustion products, Oxides of carbon, Smoke, Fume

FLAMMABILITY PROPERTIES

Flash Point [Method]: 80°C (176°F) [ASTM D-93]

Flammable Limits (Approximate volume % in air) LEL: 0.6 UEL: 4.9

Autoignition Temperature: 215°C (419°F)

SECTION 6. ACCIDENTAL RELEASE MEASURES

NOTIFICATION PROCEDURES

In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations. US regulations require reporting releases of this material to the environment which exceed the applicable reportable quantity or oil spills which could reach any waterway including intermittent dry creeks. The National Response Center can be reached at (800)424-8802.

PROTECTIVE MEASURES

Avoid contact with spilled material. Warn or evacuate occupants in surrounding and downwind areas if required due to toxicity or flammability of the material. See Section 5 for firefighting information. See the Hazard Identification Section for Significant Hazards. See Section 4 for First Aid Advice. See Section 8 for advice on the minimum requirements for personal protective equipment. Additional protective measures may be necessary, depending on the specific circumstances and/or the expert judgment of the emergency responders.

For emergency responders: Respiratory protection: half-face or full-face respirator with filter(s) for organic vapor and, when applicable, H₂S, or Self Contained Breathing Apparatus (SCBA) can be used depending on the size of spill and potential level of exposure. If the exposure cannot be completely characterized or an oxygen deficient atmosphere is possible or anticipated, SCBA is recommended. Work gloves that are resistant to aromatic hydrocarbons are recommended. Note: gloves made of polyvinyl acetate (PVA) are not water-resistant and are not suitable for emergency use. Chemical goggles are recommended if splashes or contact with eyes is possible. Small spills: normal antistatic work clothes are usually adequate. Large spills: full body suit of chemical resistant, antistatic material is recommended.

SPILL MANAGEMENT

Land Spill: Eliminate all ignition sources (no smoking, flares, sparks or flames in immediate area). Stop leak if you can do it without risk. All equipment used when handling the product must be grounded. Do not touch or walk through spilled material. Prevent entry into waterways, sewer, basements or confined areas. A vapor suppressing foam may be used to reduce vapors. Use clean non-sparking tools to collect absorbed material. Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers. Large Spills: Water spray may reduce vapor; but may not prevent ignition in closed spaces. Recover by pumping or with suitable absorbent.

Water Spill: Stop leak if you can do it without risk. Confine the spill immediately with booms. Warn other shipping. Remove from the surface by skimming or with suitable absorbents. Seek the advice of a specialist before using dispersants.

Water spill and land spill recommendations are based on the most likely spill scenario for this material; however, geographic conditions, wind, temperature, (and in the case of a water spill) wave and current direction and speed may greatly influence the appropriate action to be taken. For this reason, local experts should be consulted. Note: Local regulations may prescribe or limit action to be taken.

ENVIRONMENTAL PRECAUTIONS

Large Spills: Dike far ahead of liquid spill for later recovery and disposal. Prevent entry into waterways, sewers, basements or confined areas.

SECTION 7. HANDLING AND STORAGE

HANDLING

Avoid contact with skin. Prevent small spills and leakage to avoid slip hazard. Material can accumulate static charges which may cause an electrical spark (ignition source). When the material is handled in bulk, an electrical spark could ignite any flammable vapors from liquids or residues that may be present (e.g., during switch-loading operations). Use proper bonding and/or ground procedures. However, bonding and grounds may not eliminate the hazard from static accumulation. Consult local applicable standards for guidance. Additional references include American Petroleum Institute 2003 (Protection Against Ignitions Arising out of Static, Lightning and Stray Currents) or National Fire Protection Agency 77 (Recommended Practice on Static Electricity) or GENELEC CLC/TR 50404 (Electrostatics - Code of practice for the avoidance of hazards due to static electricity).

Loading/Unloading Temperature: [Ambient]

Transport Temperature: [Ambient]

Transport Pressure: [Ambient]

Static Accumulator: This material is a static accumulator. A liquid is typically considered a nonconductive, static accumulator if its conductivity is below 100 pS/m (100x10E-12 Siemens per meter) and is considered a semiconductive, static accumulator if its conductivity is below 10,000 pS/m. Whether a liquid is nonconductive or semiconductive, the precautions are the same. A number of factors, for example liquid temperature, presence of contaminants, anti-static additives and filtration can greatly influence the conductivity of a liquid.

STORAGE

The container choice, for example storage vessel, may effect static accumulation and dissipation. Keep container closed. Handle containers with care. Open slowly in order to control possible pressure release. Store in a cool, well-ventilated area. Storage containers should be grounded and bonded. Fixed storage containers, transfer containers and associated equipment should be grounded and bonded to prevent accumulation of static charge.

Storage Temperature: [Ambient] **Storage**

Pressure: [Ambient]

Suitable Materials and Coatings (Chemical Compatibility: Leather

Unsuitable Materials and Coatings: Vinyl Coatings; Natural Rubber; Butyl Rubber; Ethylene-propylene-diene monomer (EPDM)

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure limits/standards (Note: Exposure limits are not additive)

Substance Name	Form	Limit / Standard			NOTE	Source
NAPHTHA (PETROLEUM), HYDROTREATED HEAVY		TWA	400 mg/m3	100 ppm	N/A	OSHA Z1
NAPHTHA (PETROLEUM), HYDROTREATED HEAVY	Vapor.	RCP - TWA	1200 mg/m3	171 ppm	Total Hydrocarbons	ExxonMobil
PROCESS OIL		TWA	5 mg/m3			OSHA Z-1
PROCESS OIL		TWA- STEL	5 mg/m3	10 mg/m3		ACGIH
DISTILLATES (PETROLEUM), HYDROTREATED LIGHT	Vapor	RCP - TWA	1200 mg/m3	152 ppm	Total Hydrocarbons	ExxonMobil

NOTE: Limits/standards shown for guidance only. Follow applicable regulations.

No biological limits allocated.

ENGINEERING CONTROLS

The level of protection and types of controls necessary will vary depending upon potential exposure conditions. Control measures to consider:

Adequate ventilation should be provided so that exposure limits are not exceeded. Use explosion-proof ventilation equipment.

PERSONAL PROTECTION

Personal protective equipment selections vary based on potential exposure conditions such as applications, handling practices, concentration and ventilation. Information on the selection of protective equipment for use with this material, as provided below, is based upon intended, normal usage.

Respiratory Protection: If engineering controls do not maintain airborne contaminant concentrations at a level which is adequate to protect worker health, an approved respirator may be appropriate. Respirator selection, use, and maintenance must be in accordance with regulatory requirements, if applicable. Types of respirators to be considered for this material include: Half-face filter respirator

For high airborne concentrations, use an approved supplied-air respirator, operated in positive pressure mode. Supplied air respirators with an escape bottle may be appropriate when oxygen levels are inadequate, gas/vapor warning properties are poor, or if air purifying filter capacity/rating may be exceeded.

Hand Protection: Any specific glove information provided is based on published literature and glove manufacturer data. Glove suitability and breakthrough time will differ depending on the specific use conditions. Contact the glove manufacturer for specific advice on glove selection and breakthrough times for your use conditions. Inspect and replace worn or damaged gloves. The types of gloves to be considered for this material include:

If prolonged or repeated contact is likely, chemical resistant gloves are recommended. If contact with forearms is likely, wear gauntlet style gloves.

Eye Protection: If contact is likely, safety glasses with side shields are recommended.

Skin and Body Protection: Any specific clothing information provided is based on published literature or manufacturer data. The types of clothing to be considered for this material include:

If prolonged or repeated contact is likely, chemical, and oil resistant clothing is recommended.

Specific Hygiene Measures: Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Discard contaminated clothing and footwear that cannot be cleaned. Practice good housekeeping.

ENVIRONMENTAL CONTROLS

Comply with applicable environmental regulations limiting discharge to air, water and soil. Protect the environment by applying appropriate control measures to prevent or limit emissions.

SECTION 9. PHYSICAL & CHEMICAL PROPERTIES

Note: Physical and chemical properties are provided for safety, health and environmental considerations only and may not fully represent product specifications. Contact the Supplier for additional information.

GENERAL INFORMATION

Physical State: Waxy Soft Solid

Form: Creamy

Color: White

Odor: Odorless

Odor Threshold: N/D

IMPORTANT HEALTH, SAFETY, AND ENVIRONMENTAL INFORMATION

Relative Density (at 15 °C): 0.765
Density (at 15 °C): 764 kg/m³ (6.38 lbs/gal, 0.76 kg/dm³)
Flammability (Solid, Gas): N/A
Flash Point [Method]: 80°C (176°F) [ASTM D-93]
Flammable Limits (Approximate volume % in air): LEL: 0.7 UEL: 5.3
Autoignition Temperature: 335°C (635°F)
Boiling Point / Range: 189°C (372°F) - 209°C (408°F)
Decomposition Temperature: N/D
Vapor Density (Air = 1): 5.6 at 101 kPa
Vapor Pressure: 0.041 kPa (0.31 mm Hg) at 20 °C
Evaporation Rate (n-butyl acetate = 1): 0.09 pH:
 N/D
Log Pow (n-Octanol/Water Partition Coefficient): N/D **Solubility in**
Water: Negligible
Viscosity:
Properties: See Hazards Identification Section.

OTHER INFORMATION

Freezing Point: N/D
Melting Point: N/D
Pour Point: N/D
Weight: 162
Hygroscopic: No
Coefficient of Thermal Expansion: 0.00078 V/VDEGC

SECTION 10. STABILITY & REACTIVITY

REACTIVITY: See sub-sections below.

STABILITY: Material is stable under normal conditions.

CONDITIONS TO AVOID: Avoid heat, sparks, open flames and other ignition sources.

MATERIALS TO AVOID: Strong oxidizers

HAZARDOUS DECOMPOSITION PRODUCTS: Material does not decompose at ambient temperatures.

POSSIBILITY OF HAZARDOUS REACTIONS: Hazardous polymerization will not occur.

SECTION 11. TOXICOLOGICAL INFORMATION

INFORMATION ON TOXICOLOGICAL EFFECTS

Hazard Class	Conclusion / Remarks
Inhalation	
Acute Toxicity: (Rat) 8 hour(s) LC50 > 5000 mg/m ³ (Vapor)	Minimally Toxic. Based on test data for structurally similar materials. Test(s) equivalent or similar to OECD Guideline 403
Irritation: No end point data for material.	Negligible hazard at ambient/normal handling temperatures.
Ingestion	
Acute Toxicity (Rat): LD50 > 5000 mg/kg	Minimally Toxic. Based on test data for structurally similar materials. Test(s) equivalent or similar to OECD Guideline 401

Skin	
Acute Toxicity (Rabbit): LD50 > 5000 mg/kg	Minimally Toxic. Based on test data for structurally similar materials. Test(s) equivalent or similar to OECD Guideline 402
Skin Corrosion/Irritation: Data available.	May dry the skin leading to discomfort and dermatitis. Based on test data for structurally similar materials. Test(s) equivalent or similar to OECD Guideline 404
Eye	
Serious Eye Damage/Irritation: Data available.	May cause mild, short-lasting discomfort to eyes. Based on test data for structurally similar materials. Test(s) equivalent or similar to OECD Guideline 405
Sensitization	
Respiratory Sensitization: No end point data for material.	Not expected to be a respiratory sensitizer.
Skin Sensitization: Data available.	Not expected to be a skin sensitizer. Based on test data for structurally similar materials. Test(s) equivalent or similar to OECD Guideline 406
Aspiration: Data available.	May be fatal if swallowed and enters airways. Based on physico-chemical properties of the material.
Germ Cell Mutagenicity: Data available.	Not expected to be a germ cell mutagen. Based on test data for structurally similar materials. Test(s) equivalent or similar to OECD Guideline 471 473 474 476 478 479
Carcinogenicity: Data available.	Not expected to cause cancer. Based on test data for structurally similar materials. Test(s) equivalent or similar to OECD Guideline 453
Reproductive Toxicity: Data available.	Not expected to be a reproductive toxicant. Based on test data for structurally similar materials. Test(s) equivalent or similar to OECD Guideline 414 421 422
Lactation: No end point data for material.	Not expected to cause harm to breast-fed children.
Specific Target Organ Toxicity (STOT)	
Single Exposure: No end point data for material.	Not expected to cause organ damage from a single exposure.
Repeated Exposure: Data available.	Not expected to cause organ damage from prolonged or repeated exposure. Based on test data for structurally similar materials. Test(s) equivalent or similar to OECD Guideline 408 413 422

OTHER INFORMATION

For the product itself:

Vapor/aerosol concentrations above recommended exposure levels are irritating to the eyes and respiratory tract, may cause headaches, dizziness, anesthesia, drowsiness, unconsciousness and other central nervous system effects including death.

Prolonged and/or repeated skin contact with low viscosity materials may defat the skin resulting in possible irritation and dermatitis.

Small amounts of liquid aspirated into the lungs during ingestion or from vomiting may cause chemical pneumonitis or pulmonary edema.

The following ingredients are cited on the lists below: None.

--REGULATORY LISTS SEARCHED--

1 = NTP CARC
 2 = NTP SUS

3 = IARC 1
 4 = IARC 2A

5 = IARC 2B
 6 = OSHA CARC

OTHER INFORMATION

For the product itself:

Vapor concentrations above recommended exposure levels are irritating to the eyes and the respiratory tract, may cause headaches and dizziness, are anesthetic and may have other central nervous system effects.

Prolonged and/or repeated skin contact with low viscosity materials may defat the skin resulting in possible irritation and dermatitis.

Small amounts of liquid aspirated into the lungs during ingestion or from vomiting may cause chemical pneumonitis or pulmonary edema.

The following ingredients are cited on the lists below: None.

--REGULATORY LISTS SEARCHED--

1 = NTP CARC 3 = IARC 1 5 = IARC 2B
 Page 9 of 12

2 = NTP SUS 4 = IARC 2A 6 = OSHA CARC

SECTION 12 ECOLOGICAL INFORMATION

The information given is based on data available for the material, the components of the material, and similar materials.

ECOTOXICITY

Material -- Not expected to be harmful to aquatic organisms.
 Material -- Not expected to demonstrate chronic toxicity to aquatic organisms.

PERSISTENCE AND DEGRADABILITY Biodegradation:

Material -- Expected to be inherently biodegradable **Hydrolysis:**
 Material -- Transformation due to hydrolysis not expected to be significant. **Photolysis:**
 Material -- Transformation due to photolysis not expected to be significant. **Atmospheric**

Oxidation:

Material -- Expected to degrade rapidly in air

OTHER ECOLOGICAL INFORMATION

VOC (EPA Method 24): 6.401 lbs/gal

ECOLOGICAL DATA

Ecotoxicity

Test	Duration	Organism Type	Test Results
Aquatic - Acute Toxicity	96 hour(s)	Oncorhynchus mykiss	LL0 1000 mg/l: data for similar materials
Aquatic - Acute Toxicity	48 hour(s)	Daphnia magna	EL0 1000 mg/l: data for similar materials
Aquatic - Acute Toxicity	72 hour(s)	Pseudokirchneriella subcapitata	EL0 1000 mg/l: data for similar materials
Aquatic - Chronic Toxicity	21 day(s)	Daphnia magna	NOELR 1 mg/l: data for the material
Aquatic - Acute Toxicity	72 hour(s)	Pseudokirchneriella subcapitata	NOELR 1000 mg/l: data for similar materials

Persistence, Degradability and Bioaccumulation Potential

Media	Test Type	Duration	Test Results
Water	Ready Biodegradability	28 day(s)	Percent Degraded 31.3 : similar material

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal recommendations based on material as supplied. Disposal must be in accordance with current applicable laws and regulations, and material characteristics at time of disposal.

DISPOSAL RECOMMENDATIONS

Product is suitable for burning in an enclosed controlled burner for fuel value or disposal by supervised incineration at very high temperatures to prevent formation of undesirable combustion products.

REGULATORY DISPOSAL INFORMATION

RCRA Information: The unused product, in our opinion, is not specifically listed by the EPA as a hazardous waste (40 CFR, Part 261D), nor is it formulated to contain materials which are listed as hazardous wastes. It does not exhibit the hazardous characteristics of ignitability, corrosivity or reactivity and is not formulated with contaminants as determined by the Toxicity Characteristic Leaching Procedure (TCLP). However, used product may be regulated.

Empty Container Warning Empty Container Warning (where applicable): Empty containers may contain residue and can be dangerous. Do not attempt to refill or clean containers without proper instructions. Empty drums should be completely drained and safely stored until appropriately reconditioned or disposed. Empty containers should be taken for recycling, recovery, or disposal through suitably qualified or licensed contractor and in accordance with governmental regulations. DO NOT PRESSURISE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND, OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION. THEY MAY EXPLODE AND CAUSE INJURY OR DEATH.

SECTION 14. TRANSPORT INFORMATION

LAND (DOT)

Proper Shipping Name: BOOT DRESSING/NON-HAZARDOUS
Hazard Class & Division: COMBUSTIBLE LIQUID ID
Number: 58420
Packing Group: III
ERG Number: 128 **Label(s):**
 NONE
Transport Document Name: UN1268, PETROLEUM DISTILLATES, N.O.S., COMBUSTIBLE LIQUID, PG III

Footnote: This material is not regulated under 49 CFR in a container of 119 gallon capacity or less when transported solely by land, as long as the material is not a hazardous waste, a marine pollutant, or specifically listed as a hazardous substance.

LAND (TDG): Not Regulated for Land Transport

SEA (IMDG): Not Regulated for Sea Transport according to IMDG-Code

Marine Pollutant: No

AIR (IATA): Not Regulated for Air Transport

SECTION 15. REGULATORY INFORMATION

OSHA HAZARD COMMUNICATION STANDARD: This material is considered hazardous in accordance with OSHA

HazCom 2012, 29 CFR 1910.1200.

Listed or exempt from listing/notification on the following chemical inventories: AICS, DSL, ENCS, IECSC, KECI, PICCS, TCSI, TSCA

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302

CERCLA: This material is not subject to any special reporting under the requirements of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA). CERCLA petroleum exclusion applies for this product. Contact local authorities to determine if other reporting requirements apply.

SARA (311/312) REPORTABLE HAZARD CATEGORIES: Fire. Immediate Health. Delayed Health.

SARA (313) TOXIC RELEASE INVENTORY: This material contains no chemicals subject to the supplier notification requirements of the SARA 313 Toxic Release Program.

The following ingredients are cited on the lists below: None.

--REGULATORY LISTS SEARCHED--

1 = ACGIH ALL	6 = TSCA 5a2	11 = CA P65 REPRO	16 = MN RTK
2 = ACGIH A1	7 = TSCA 5e	12 = CA RTK	17 = NJ RTK
3 = ACGIH A2	8 = TSCA 6	13 = IL RTK	18 = PA RTK
4 = OSHA Z	9 = TSCA 12b	14 = LA RTK	19 = RI RTK
5 = TSCA 4	10 = CA P65 CARC	15 = MI 293	

Code key: CARC=Carcinogen; REPRO=Reproductive

SECTION 16. OTHER INFORMATION

N/D = Not determined, N/A = Not applicable

KEY TO THE H-CODES CONTAINED IN SECTION 3 OF THIS DOCUMENT (for information only):

H227: Combustible liquid; Flammable Liquid, Cat 4

H304: May be fatal if swallowed and enters airways; Aspiration, Cat 1

THIS SAFETY DATA SHEET CONTAINS THE FOLLOWING REVISIONS:

Revision Changes:

Section 01: Company Mailing Address information was modified.

Section 05: Hazardous Combustion Products information was modified.

Section 15: National Chemical Inventory Listing information was modified.

Section 15: Community RTK - Header information was modified.

Section 14: Marine Pollutant information was modified.

Hazard Not Otherwise Classified information was modified.

Section 01: Company Mailing Address information was added.

NOTICE

The supplier disclaims all expressed or implied warranties of merchantability or fitness for a specific use, with respect to the product or the information provided herein, except for conformation to contracted specifications. All information appearing herein is based upon data obtained from manufacturers and/or recognized technical sources. While the information is believed to be accurate, we make no representations as to its accuracy or sufficiency. Conditions of use are beyond our control, and therefore users are responsible for

COMPANY IDENTITY: Trondak, Inc.
PRODUCT IDENTITY: AQUASEAL FOR LEATHER - CRÈME

SDS DATE: 06/27/2016
REPLACES: 05/16/2016

verifying the data under their own operating conditions to determine whether the product is suitable for their particular purposes and they assume all risks of their handling, and disposal of the product. Users also assume all risks in regards to the publication or use of, or reliance upon information contained herein.
This information relates only to the product designated herein, and does not relate to its use in combination with any other material or process.

Unless updated, the Safety Data Sheet is valid until 06/27/2019.

SAFETY DATA SHEET

SECTION 1 – PRODUCT AND COMPANY IDENTIFICATION

Manufacturer's name and address:



ARDEX Engineered Cements
400 Ardex Park Dr.
Aliquippa, PA 15001 USA

Supplier's name and address:

Refer to Manufacturer

Information Telephone No. : (888) 512-7339 or (724) 203-5000
Website Address : <http://www.ardexamericas.com>
24 Hr Emergency Telephone # : CHEM-TEL: 1-800-255-3924 OR 1-813-248-0585 (call collect)
Product Identifier : ARDEX FEATHER FINISH®
Product ID No. : 70012141
Trade Name/Synonyms : SD-F
Material Use : Cement-based Finishing Underlayment
Uses Advised Against : No information available.

SECTION 2 – HAZARDS IDENTIFICATION

GHS Classification per 29 CFR 1910.1200 (OSHA HCS 2012) and HPR (WHMIS 2015)

Skin corrosion/irritation, Category 1A
Serious eye damage/eye irritation, Category 1
Carcinogenicity, Category 1A
Specific target organ toxicity, single exposure; Respiratory tract irritation, Category 3
Specific target organ toxicity, repeated exposure, Category 1.

GHS Pictograms



Signal Word

Danger

Hazard Statements

Causes severe skin burns and eye damage.
May cause cancer by inhalation.
May cause respiratory irritation.
Causes damage to lungs through prolonged or repeated inhalation.

Precautionary Statements

Obtain special instructions before use. (See Section 7.) Do not handle until all safety precautions have been read and understood. Do not breathe dust. Use only outdoors or in a well-ventilated area. Wash hands and exposed skin thoroughly after handling. Wear protective gloves/protective clothing/eye protection. Wash contaminated clothing before reuse. Store in a well-ventilated place. Keep container tightly closed. Protect from sunlight. Store locked up. Dispose of contents / container in accordance with federal, state, and local laws. Do not allow product to enter drains.

Hazards Not Otherwise Classified

None

% With Unknown Acute Toxicity : Up to 40% by weight of this product consists of ingredients with unknown acute toxicity.

SECTION 3 – COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients	CAS #	% (by weight)
Calcium aluminate cement	65997-16-2	30 – 60
Limestone	1317-65-3	30 – 60
Calcium sulfate	7778-18-9	10 – 30
Vinyl acetate copolymer	24937-78-8	10 – 30
Cellulose	9004-34-6	1 - 5
Portland cement	65997-15-1	1 - 5
Crystalline silica, quartz**	14808-60-7	0.1 – 1.0

The exact percentages of the ingredients have been withheld by the manufacturer as trade secrets.

**Note: Crystalline Silica (Quartz) is not intentionally added to this product, but is a naturally occurring component in limestone (Calcium Carbonate).

SECTION 4 – FIRST AID MEASURES

- General** : Call a Poison Center or doctor if you feel unwell.
- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If experiencing respiratory symptoms: call a doctor/physician.
- Skin contact** : Remove/Take off immediately all contaminated clothing. Flush affected skin with gently flowing lukewarm water for at least 20 minutes. Seek immediate medical attention/advice.
- Eye contact** : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical advice/attention.
- Ingestion** : Rinse mouth. Do NOT induce vomiting. Call a POISON CENTER or doctor/physician if you feel unwell.
- Notes for Physician** : Treat symptomatically.

Signs and symptoms of short-term (acute) exposure

- Inhalation* : Symptoms may include coughing and shortness of breath.
- Skin* : Symptoms may include redness and itching. Contact with wet material, or moist areas of skin, causes skin burns. Skin thickening, cracking, or fissuring may occur.
- Eyes* : Direct contact may strongly irritate or burn the eyes. Could cause blindness.
- Ingestion* : Symptoms such as gastric pain, nausea, vomiting, and diarrhea may occur.

Effects of long-term (chronic) exposure

- : Prolonged inhalation may cause adverse lung effects with symptoms including coughing and shortness of breath. Repeated or prolonged inhalation of fine dusts may cause severe scarring of the lungs, a disease called silicosis, and alveolar proteinosis (lower lung disease).

Indication of need for immediate medical attention or special treatment

- : Difficulty breathing persists after removing the person to fresh air.
Any burn to the skin.
Any exposure to the eye which causes irritation.
Ingestion.

SECTION 5 – FIRE FIGHTING MEASURES

- Suitable extinguishing media** : Carbon dioxide, dry chemical powder, foam.

- Unsuitable extinguishing media** : Water. Contact with water may cause hydration and formation of caustic alkaline material.
- Hazardous combustion products** : Calcium oxide, calcium oxalate, vinyl acetate, acetic acid, formic acid, formaldehydes, carbon monoxide, and carbon dioxide.

Special fire-fighting procedures/equipment

- : Firefighters should wear proper protective equipment and self-contained breathing apparatus with full face piece operated in positive pressure mode. Move containers from fire area if safe to do so. Water spray may be useful in cooling equipment exposed to heat and flame. After fires have been extinguished, carefully clean all equipment and surfaces exposed to fumes.

- Environmental precautions** : Do not allow material to enter drains or contaminate ground water system.

Fire hazards/conditions of flammability

- : Not flammable under normal conditions of use. Closed containers may rupture if exposed to excess heat or flame due to a build-up of internal pressure.

Flammability classification (OSHA 29 CFR 1910.1200, WHMIS 2015)

- : Not flammable

SECTION 6 – ACCIDENTAL RELEASE MEASURES

- Personal precautions** : Restrict access to area until completion of clean-up. All persons dealing with clean-up should wear the appropriate chemically protective equipment.
- Protective equipment** : Refer to Section 8 on this Safety Data Sheet, EXPOSURE CONTROLS / PERSONAL PROTECTION, for additional information on acceptable personal protective equipment.
- Emergency Procedures** : If a spill/release in excess of the EPA reportable quantity is made into the environment, immediately notify the national response center in the United States (phone: 1-800-424-8002).
US CERCLA Reportable quantity (RQ): None reported.
- Methods and materials for containment and cleaning up** : Ventilate area of release. Eliminate all ignition sources. Stop spill or leak at source if safely possible. Contain material, preventing it from entering sewer lines or waterways. Using HEPA vacuum, or other dustless methods, gather up spilled material and place in suitable container for later disposal (see Section 13). Avoid adding water, material becomes alkaline when wet. Notify the appropriate authorities as required.
- Prohibited materials** : Avoid adding water, material becomes alkaline when wet.
- Environmental precautions** : Do not allow product to enter drains or waterways. Do not allow material to contaminate ground water system.
- Reference to other sections** : See Section 13 for disposal information.

SECTION 7 – HANDLING AND STORAGE

- Special instructions** : Mixing the product according to the directions in the Technical Data Sheet will produce airborne dusts, including crystalline silica. Wear a dust mask (N-95 or higher) while mixing. Use ventilation to control levels of dust in the work area.
- Safe handling procedures** : Corrosive! Wear chemically resistant protective equipment during handling. Use in a well-ventilated area. Training the workers on the potential health hazards associated with product dust is important. Secondary inhalation exposures could occur when cleaning equipment, or when removing or laundering the clothing. Do not breathe dust. Avoid contact with skin, eyes and clothing. Avoid wet or humid conditions. Keep away from acids and incompatibles. Avoid and control operations which create dust. Keep containers tightly closed when not in use. Wash thoroughly after handling.
- Storage requirements** : Store in a cool, dry, well-ventilated area. Store away from heat and open flame. Avoid storing in direct sunlight. Store in original container. Keep tightly closed when not in use. Do not reuse empty container without commercial cleaning or reconditioning.
- Incompatible materials** : See Section 10.

Special packaging materials : Always keep in containers made of the same materials as the supply container.

SECTION 8 – EXPOSURE CONTROLS AND PERSONAL PROTECTION

Permissible Exposure Limits : No exposure limits have been established for the product itself. Below are exposure limits for the components in the product.

Threshold Limit Values for the Ingredients	CAS #	ACGIH TLV		OSHA PEL	
		TWA	STEL	PEL	STEL
Limestone	1317-65-3	TLV Withdrawn In 2007	N/Av	15 mg/m ³ (Total dust); 5 mg/m ³ (respirable)	N/Av
Calcium aluminat cement	65997-16-2	1 mg/m ³ (as Aluminum metal and insoluble compounds)	N/Av	N/Av	N/Av
Calcium sulfate	7778-18-9	10 mg/m ³ (inhalable)	N/Av	15 mg/m ³ (Total dust); 5 mg/m ³ (respirable)	N/Av
Portland cement	65997-15-1	1 mg/m ³ (respirable, no asbestos and < 1% crystalline silica)	N/Av	15 mg/m ³ (Total dust); 5 mg/m ³ (respirable)	N/Av
Cellulose	9004-34-6	10 mg/m ³	N/Av	15 mg/m ³ (Total dust); 5 mg/m ³ (respirable)	N/Av
Vinyl acetate copolymer	24937-78-8	10 mg/m ³ (Total dust); 3 mg/m ³ (respirable)	N/Av	15 mg/m ³ (Total dust); 5 mg/m ³ (respirable)	N/Av
Crystalline silica, quartz	14808-60-7	0.025 mg/m ³ (respirable fraction)	N/Av	0.1 mg/m ³ (respirable (final rule limit)	N/Av

Engineering Controls : Use general or local exhaust ventilation to maintain air concentrations below recommended exposure limits. Ventilation should effectively remove and prevent buildup of any dust generated from the handling of this product.

Personal Protection Equipment

Eye / face protection : Safety glasses or chemical goggles must be worn when using this product. Additionally, a face shield is recommended if splashing is possible.

Skin protection : Wear chemical resistant protective clothing and impervious gloves. Glove materials such as nitrile rubber or Viton (fluorocarbon rubber) are recommended.

Body protection : Where extensive exposure to product is possible, use resistant coveralls, apron and boots to prevent contact.

Respiratory protection : If work process generates excessive quantities of dust, or exposures in excess of any PEL, wear an appropriate particulate respirator (dust mask). Mask should be rated at N-95 or higher.

Site safety equipment : An eyewash station and safety shower should be made available in the immediate working area.

General hygiene considerations : Avoid contact with eyes, skin and clothing. Do not breathe dust. Do not eat, drink or smoke when using this product. Clean all equipment and clothing at end of each work shift.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Physical state	: solid	Appearance	: gray powder
Odor	: No odor	Odor threshold	: N/Av
pH	: 10 – 12	Specific gravity	: 2.7 – 3.1
Boiling point	: N/Av	Coefficient of water/oil distribution	: N/Av
Melting/Freezing point	: N/Av	Solubility in water	: < 55 g/L
Vapor pressure (mm Hg @ 20°C / 68°F)	: N/Av	Evaporation rate (n-Butyl acetate = 1)	: N/Av
Vapor density (Air = 1)	: N/Av	Volatiles (% by weight)	: N/Av
Volatile organic compounds (VOCs)	: 0 g/L		
Particle size	: N/Av	Flammability classification	: Not flammable
Flash point	: N/Av	Lower flammable limit (% by vol)	: Not available
Flash point method	: N/Av	Upper flammable limit (% by vol)	: Not available
Auto-ignition temperature	: N/Av	Decomposition temperature	: Not available
Viscosity	: Not available	Oxidizing properties	: Not available

Explosion data: Sensitivity to mechanical impact / static discharge
: Not expected to be sensitive to mechanical impact or static discharge.

SECTION 10 – REACTIVITY AND STABILITY INFORMATION

Reactivity	: Contact with water may cause hydration and formation of caustic calcium hydroxide.
Stability	: Stable under the recommended storage and handling conditions prescribed.
Hazardous reactions	: Hazardous polymerization does not occur.
Conditions to avoid	: High temperatures.
Materials to avoid and incompatibility	: Oxidizing agents.
Hazardous decomposition products	: None known, refer to hazardous combustion products in Section 5.

SECTION 11 – TOXICOLOGICAL INFORMATION

Routes of exposure	: <i>Inhalation</i> : YES <i>Skin Absorption</i> : NO <i>Skin and Eyes</i> : YES <i>Ingestion</i> : YES
Symptoms of exposure	: See Section 4.
Calculated Acute Toxicity Estimates for the Product	
<i>Inhalation</i>	: Not Available
<i>Oral</i>	: Not Available
<i>Dermal</i>	: Not Available
Toxicological data	: There are insufficient data for estimating the product's acute toxicity. Several components become caustic in the presence of water, and therefore should not be inhaled, ingested, or allowed to contact skin. See below for individual ingredient acute toxicity data.

Acute Toxicity Parameters for the Ingredients	CAS #	LC50, Inhalation mg/L, Rat, 4 hr	LD50, Oral mg/kg, rat	LD50, Dermal mg/kg, rabbit
Limestone	1317-65-3	N/Av	6,450	N/Av
Calcium aluminat cement	65997-16-2	N/Av	N/Av	N/Av
Calcium sulfate	7778-18-9	N/Av	> 3,000	NAv
Portland cement	65997-15-1	N/Av	N/Av	N/Av
Cellulose	9004-34-6	> 5.8	> 2,000	> 2,000
Vinyl acetate copolymer	24937-78-8	N/Av	> 1,000	N/Av
Crystalline silica, quartz	14808-60-7	N/Av	N/Av	N/Av

Skin corrosion or irritation : Causes skin corrosion when wet.

- Serious eye damage / eye irritation** : Causes eye burns. May cause blindness.
- Respiratory or skin sensitization** : Portland cement may cause an allergic skin reaction, in hypersensitive individuals possibly due to trace amounts of chromium.
- Germ cell mutagenicity** : None known.
- Carcinogenic status** : This product contains Crystalline silica. Crystalline silica (respirable size) is classified as carcinogenic by inhalation by IARC (Group 1), ACGIH (Group A2), NTP (Group 1) and OSHA (OSHA Select carcinogen). No other components are listed as carcinogens by ACGIH, IARC, OSHA or NTP.
- Reproductive toxicity** : None known.
- Specific Target Organ Toxicity, Single Exposure** : May cause respiratory irritation.
- Specific Target Organ Toxicity, Repeated Exposure** : May cause lung damage upon repeated or prolonged exposure.
- Aspiration hazard** : None known.
- Additional information** : N/Av

SECTION 12 – ECOLOGICAL INFORMATION

- Environmental effects** : The product should not be allowed to enter drains or water courses, or be deposited where it can affect ground or surface waters.
- Ecotoxicological** : No data is available on the product itself.
- Ecotoxicity** : No data available.
- Biodegradability** : No data available.
- Bioaccumulative potential** : No data available.
- Mobility in soil** : No data available.
- PBT and vPvB assessment** : No data available.
- Other adverse effects** : No data available.

SECTION 13 – DISPOSAL CONSIDERATION

- Handling for disposal** : Handle waste according to recommendations in Section 7.
- Methods of disposal** : You must test your waste using methods described in 40 CFR Part 261 to determine if it meets applicable definitions of hazardous wastes. Dispose in accordance with all applicable federal, state, provincial and local regulations. Contact your local, state, provincial or federal environmental agency for specific rules.
- Packaging** : Handle contaminated packaging in the same manner as the product.
- RCRA** : If this product, as supplied, becomes a waste in the United States, it may meet the criteria of a hazardous waste as 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

Regulatory Information	UN Number	Shipping Name	Class	Packing Group	Label
TDG	None	This product is not regulated according to Canadian TDG regulations.	None	None	None
TDG Additional Information	None				
49 CFR/DOT	None	This product is not regulated according to US DOT regulations.	None	None	None

49 CFR/DOT Additional Information	None
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SECTION 15 – REGULATORY INFORMATION

Canadian Information:

This product has been classified according to the hazard criteria of the Hazardous Products Regulations (HPR). This SDS contains all of the information required by the HPR.

Canadian Environmental Protection Act (CEPA) information: All ingredients listed appear on either the Domestic Substances List (DSL) or the Non- Domestic Substances List (NDSL).

US Federal Information:

TSCA: All listed ingredients appear on the Toxic Substances Control Act (TSCA) inventory.

CERCLA Reportable Quantity (RQ) (40 CFR 117.302): None reported.

SARA TITLE III: Sec. 311 and 312, SDS Requirements, 40 CFR 370 Hazard Classes:
Immediate (Acute) Health Hazard
Chronic Health Hazard.

Under SARA Sections 311 and 312, the EPA has established threshold quantities for the reporting of hazardous chemicals. The current thresholds are 500 pounds or the threshold planning quantity (TPQ), whichever is lower, for extremely hazardous substances and 10,000 pounds for all other hazardous chemicals.

SARA TITLE III: Sec. 313, Toxic Chemicals Notification, 40 CFR 372: This material is not subject to SARA notification requirements, since it does not contain any Toxic Chemical constituents above *de minimus* concentrations.

U.S. State Right To Know Laws

California Proposition 65: Warning! This product contains a chemical known to the State of California to cause cancer. It contains Crystalline silica, quartz.

Other State Right to Know Laws:

Ingredient on State RTK Law?	CAS #	CA	MA	MN	NJ	PA	RI
Limestone	1317-65-3	No	YES	No	YES	YES	YES
Portland cement	65997-15-1	No	YES	No	YES	YES	YES
Calcium sulfate	7778-18-9	No	YES	No	YES	YES	No
Cellulose	9004-34-6	No	YES	No	YES	YES	YES
Crystalline silica, quartz	14808-60-7	No	YES	YES	YES	YES	YES

SECTION 16 – OTHER INFORMATION

HMIS Rating : * - Chronic Hazard 0 - Minimal 1 - Slight 2 - Moderate 3 - Serious 4 - Severe
Health: *3 Flammability 0 Physical Hazard 1 PPE: G
Gloves, safety glasses, and dust respirator

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
DOT: Department of Transportation
DSL: Domestic Substances List
EPA: Environmental Protection Agency
GHS: Globally Harmonized System
HPR: Hazardous Products Regulations
IARC: International Agency for Research on Cancer
Inh: Inhalation

N/Av: Not Available
N/Ap: Not Applicable
NIOSH: National Institute of Occupational Safety and Health
NTP: National Toxicology Program
OSHA: Occupational Safety and Health Administration
PEL: Permissible exposure limit
RCRA: Resource Conservation and Recovery Act
SARA: Superfund Amendments and Reauthorization Act
STEL: Short Term Exposure Limit
TDG: Canadian Transportation of Dangerous Goods Act & Regulations
TLV: Threshold Limit Values
TSCA: Toxic Substance Control Act
TWA: Time Weighted Average
WHMIS: Workplace Hazardous Materials Identification System

Disclaimer of Liability

The Information presented herein is supplied as a guide to those who handle or use this product and has been prepared in good faith by technically knowledgeable personnel. It is not intended to be all-inclusive. The manner and conditions of use and handling may involve other and additional considerations. Safe work practices must be employed when working with any materials. It is important that the end user makes a determination regarding the adequacy of the safety procedures employed during the use of this product.

No warranty of any kind is given or implied. ARDEX Engineered Cements will not be liable for any damages, losses, injuries or consequential damages which may result from the use or reliance on any information contained herein.

Prepared By:
ARDEX Engineered Cements
400 Ardex Park Drive
Aliquippa, PA, U.S.A.
15001

(724) 203-5000
Visit our Website: <http://www.ardexamericas.com>

Revision date: : 05-Mar-2015

End of Document

SAFETY DATA SHEET

SECTION 1 – PRODUCT AND COMPANY IDENTIFICATION

Product Identifier : **ARDEX X 5™ White**
Product ID No. : 70012501
Trade Name/Synonyms : X 5 White
Material Use : Flexible Tile and Stone Mortar
Uses Advised Against : Use only as recommended in the product's Technical Data Sheet.

Manufacturer's name and address:

Supplier's name and address:



ARDEX L.P.
400 Ardex Park Dr.
Aliquippa, PA 15001 USA

Refer to Manufacturer

Information Telephone No. : (888) 512-7339 or (724) 203-5000
Website Address : <http://www.ardexamericas.com>
24 Hr Emergency Telephone # : CHEM-TEL: 1-800-255-3924 OR 1-813-248-0585 (call collect)

SECTION 2 – HAZARDS IDENTIFICATION

GHS Classification per 29 CFR 1910.1200 (OSHA HCS 2012) and HPR (WHMIS 2015)

Skin corrosion/irritation, Category 1
Serious eye damage/eye irritation, Category 1
Carcinogenicity, Category 1
Specific target organ toxicity, repeated exposure, Category 1.

GHS Pictograms



Signal Word

Danger

Hazard Statements

Causes severe skin burns and eye damage.
May cause cancer by inhalation.
Causes damage to lungs through prolonged or repeated inhalation.

Precautionary Statements

Obtain special instructions before use. (See Section 7.) Do not handle until all safety precautions have been read and understood. Do not breathe dust. Use only in a well-ventilated area. Wash hands and exposed skin thoroughly after handling. Wear protective gloves/protective clothing/eye protection. Wash contaminated clothing before reuse. Keep container tightly closed. Protect from sunlight. Store locked up. Dispose of contents / container in accordance with federal, state, and local laws. Do not allow product to enter drains.

Hazards Not Otherwise Classified

None

% With Unknown Acute Toxicity : Up to 95% by weight of this product consists of ingredients with unknown acute toxicity.

SECTION 3 – COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients	CAS #	% (by weight)
Crystalline silica, quartz	14808-60-7	30 – 60
Portland cement	65997-15-1	30 – 60
VA/E copolymer, [Poly(ethylene, ethylenyl acetate)]	24937-78-8	1 - 5
Amorphous fumed silica	69012-64-2	1 – 5

The exact percentages of the ingredients have been withheld by the manufacturer as trade secrets.

SECTION 4 – FIRST AID MEASURES

- General** : Call a Poison Center or doctor if you feel unwell.
- Inhalation** : Remove person to fresh air and keep at rest in a position comfortable for breathing. Get medical attention.
- Skin contact** : Remove contaminated clothing. Flush affected skin with water. If irritation or rash occurs, seek medical attention/advice.
- Eye contact** : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention.
- Ingestion** : Rinse mouth. Do NOT induce vomiting. Call a POISON CENTER or doctor/physician if you feel unwell.
- Notes for Physician** : Treat symptomatically.

Signs and symptoms of short-term (acute) exposure

- Inhalation* : Symptoms may include coughing and shortness of breath.
- Skin* : Symptoms may include redness and itching. Contact with wet material, or moist areas of skin, causes skin burns. Skin thickening, cracking, or fissuring may occur.
- Eyes* : Direct contact may strongly irritate or burn the eyes. Could cause blindness.
- Ingestion* : Symptoms such as gastric pain, nausea, vomiting, and diarrhea may occur.

Effects of long-term (chronic) exposure

- : Prolonged inhalation may cause adverse lung effects with symptoms including coughing and shortness of breath. Repeated or prolonged inhalation of fine dusts may cause severe scarring of the lungs, a disease called silicosis, and alveolar proteinosis (lower lung disease). Silicosis has been linked to kidney damage and autoimmune disorders.

Indication of need for immediate medical attention or special treatment

- : Difficulty breathing persists after removing the person to fresh air.
Any burn to the skin.
Any exposure to the eye which causes irritation.
Ingestion.

SECTION 5 – FIRE FIGHTING MEASURES

- Suitable extinguishing media** : Carbon dioxide, dry chemical powder, foam.
- Unsuitable extinguishing media** : Water. Water will damage the paper bags. Contact of the product with water will form caustic alkaline material.
- Hazardous combustion products** : Calcium oxide, calcium oxalate, acetic acid, formic acid, formaldehydes, carbon monoxide, and carbon dioxide.
- Special fire-fighting procedures/equipment** : Firefighters should wear proper protective equipment and self-contained breathing apparatus with full face piece operated in positive pressure mode. Move containers from fire area if safe to do so.

Environmental precautions : Do not allow material to enter drains or contaminate ground water system.

Fire hazards/conditions of flammability

: Product is not flammable. Packaging is paper and plastic.

Flammability classification (OSHA 29 CFR 1910.1200, WHMIS 2015)

: Not flammable

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Personal precautions

: Restrict access to area until completion of clean-up. All persons dealing with clean-up should wear the appropriate chemically protective equipment.

Protective equipment

: Refer to Section 8 for additional information on acceptable personal protective equipment.

Emergency Procedures

: This product does not contain chemicals requiring EPA notification for spills. In case of a chemical spill, call the emergency telephone number listed in Section 1. US CERCLA Reportable quantity (RQ): None reported.

Methods and materials for containment and cleaning up

: Ventilate area of release. Stop spill or leak at source if safely possible. Contain material, preventing it from entering sewer lines or waterways. Using HEPA vacuum, or other dustless methods, gather up spilled material and place in suitable container for later disposal (see Section 13). Notify the appropriate authorities as required.

Prohibited materials

: Avoid adding water. This product becomes alkaline when wet.

Environmental precautions

: Do not allow product to enter drains or waterways. Do not allow material to contaminate ground water system.

Reference to other sections

: See Section 13 for disposal information.

SECTION 7 – HANDLING AND STORAGE

Special instructions

: Use ventilation to control levels of dust in the work area.

Safe handling procedures

: Wear chemically resistant protective equipment during handling. Use in a well-ventilated area. Training the workers on the potential health hazards associated with product dust is important. Secondary inhalation exposures could occur when cleaning equipment, or when removing or laundering the clothing. Do not breathe dust. Avoid and control operations which create dust. Keep containers tightly closed when not in use. Wash hands and exposed skin thoroughly after handling.

Storage requirements

: Store in a cool, dry place. Store away from heat and open flame. Avoid storing in direct sunlight. Store in original container. Keep tightly closed when not in use. Store locked up. Keep out of reach of children.

Incompatible materials

: Keep away from strong acids and oxidizing agents. (See Section 10.)

Special packaging materials

: Always keep in containers made of the same materials as the supply container.

SECTION 8 – EXPOSURE CONTROLS AND PERSONAL PROTECTION

Permissible Exposure Limits

: No exposure limits have been established for the product itself. Below are exposure limits for the components in the product.

Threshold Limit Values for the Ingredients	CAS #	ACGIH TLV		OSHA PEL	
		TWA	STEL	PEL	STEL
Crystalline silica, quartz	14808-60-7	0.025 mg/m ³ (respirable fraction)	N/Av	0.05 mg/m ³ (respirable) (final rule limit)	N/Av
Portland cement	65997-15-1	1 mg/m ³ (respirable,	N/Av	15 mg/m ³ (Total dust);	N/Av

		no asbestos and < 1% crystalline silica)		5 mg/m ³ (respirable)	
VA/E copolymer, [Poly(ethylene, ethylenyl acetate)]	24937-78-8	10 mg/m ³ (Total dust); 3 mg/m ³ (respirable)	N/Av	15 mg/m ³ (Total dust); 5 mg/m ³ (respirable)	N/Av
Amorphous fumed silica	69012-64-2	2 mg/m ³ (respirable)	N/Av	N/Av	N/Av

Engineering Controls : Use general ventilation in combination with local exhaust ventilation with HEPA filtration to maintain air concentrations below recommended exposure limits. Ventilation should effectively remove and prevent buildup of any dust generated from the handling of this product.

Personal Protective Equipment

- Eye / face protection** : Safety glasses or chemical goggles must be worn when using this product. Additionally, a face shield is recommended if splashing is possible.
- Skin protection** : Wear chemical resistant protective clothing and impervious gloves. Glove materials such as nitrile rubber or Viton (fluorocarbon rubber) are recommended.
- Body protection** : Where extensive exposure to product is possible, use resistant coveralls, apron and boots to prevent contact.
- Respiratory protection** : If work process generates excessive quantities of dust, or exposures in excess of any PEL, wear an appropriate particulate respirator (dust mask). Mask should be rated at N-95 or higher.

Site safety equipment : An eyewash station and safety shower should be made available in the immediate working area.

General hygiene considerations : Avoid contact with eyes, skin and clothing. Do not breathe dust. Do not eat, drink or smoke when using this product. Clean all equipment and clothing at end of each work shift. This product contains crystalline silica. Comply with all requirements within OSHA Standard 29 CFR § 1926.1153 - Respirable crystalline silica for Construction.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

- | | | | |
|---|-----------------|---|-----------------|
| Physical state | : solid | Appearance | : white powder |
| Odor | : No odor | Odor threshold | : N/Av |
| pH | : 10 – 12 | Specific gravity | : 2.7 – 3.1 |
| Boiling point | : N/Av | Coefficient of water/oil distribution | : N/Av |
| Melting/Freezing point | : N/Av | Solubility in water | : < 55 g/L |
| Vapor pressure (mm Hg @ 20°C / 68°F) | : N/Av | Evaporation rate (n-Butyl acetate = 1) | : N/Av |
| Vapor density (Air = 1) | : N/Av | Volatiles (% by weight) | : N/Av |
| Volatile organic compounds (VOCs) | : 0 g/L | | |
| Particle size | : N/Av | Flammability classification | : Not flammable |
| Flash point | : N/Av | Lower flammable limit (% by vol) | : Not available |
| Flash point method | : N/Av | Upper flammable limit (% by vol) | : Not available |
| Auto-ignition temperature | : N/Av | Decomposition temperature | : Not available |
| Viscosity | : Not available | Oxidizing properties | : Not available |
- Explosion data: Sensitivity to mechanical impact / static discharge**
: Not expected to be sensitive to mechanical impact or static discharge.

SECTION 10 – REACTIVITY AND STABILITY INFORMATION

Reactivity : Contact with water may cause hydration and formation of caustic calcium hydroxide.

- Stability** : Stable under the recommended storage and handling conditions prescribed.
- Hazardous reactions** : Hazardous polymerization does not occur.
- Conditions to avoid** : High temperatures.
- Materials to avoid and incompatibility** : Oxidizing agents. Strong acids.
- Hazardous decomposition products** : None known, refer to hazardous combustion products in Section 5.

SECTION 11 – TOXICOLOGICAL INFORMATION

- Routes of exposure** : *Inhalation*: YES *Skin Absorption*: NO *Skin and Eyes*: Yes *Ingestion*: YES
- Symptoms of exposure** : See Section 4.
- Calculated Acute Toxicity Estimates for the Product**
- Inhalation* : Not Available
- Oral* : Not Available
- Dermal* : Not Available
- Toxicological data** : There are insufficient data for estimating the product's acute toxicity. See below for individual ingredient acute toxicity data.

Acute Toxicity Parameters for the Ingredients	CAS #	LC50, Inhalation mg/L, Rat, 4 hr	LD50, Oral mg/kg, rat	LD50, Dermal mg/kg, rabbit
Crystalline silica, quartz	14808-60-7	N/Av	N/Av	N/Av
Portland cement	65997-15-1	N/Av	N/Av	N/Av
VA/E copolymer, [Poly(ethylene, ethylenyl acetate)]	24937-78-8	N/Av	> 1,000	N/Av
Amorphous fumed silica	69012-64-2	N/Av	>22,500	N/Av

- Skin corrosion or irritation** : Causes skin corrosion when wet.
- Serious eye damage / eye irritation** : Causes eye burns. May cause blindness.
- Respiratory or skin sensitization** : Portland cement may cause an allergic skin reaction, in hypersensitive individuals possibly due to trace amounts of chromium.
- Germ cell mutagenicity** : None known.
- Carcinogenic status** : This product contains Crystalline silica. Crystalline silica (respirable size) is classified as carcinogenic by inhalation by IARC (Group 1), ACGIH (Group A2), NTP (Group 1) and OSHA (OSHA Select carcinogen). No other components are listed as carcinogens by ACGIH, IARC, OSHA or NTP.
- Reproductive toxicity** : None known.
- Specific Target Organ Toxicity, Single Exposure** : May cause respiratory irritation.
- Specific Target Organ Toxicity, Repeated Exposure** : May cause lung damage (silicosis) upon repeated or prolonged exposure. Silicosis may be accompanied by complications such as kidney damage and autoimmune disorders.
- Aspiration hazard** : None known.
- Additional information** : N/Av

SECTION 12 – ECOLOGICAL INFORMATION

- Environmental effects** : The product should not be allowed to enter drains or water courses or be deposited where it can affect ground or surface waters.
- Ecotoxicological** : No data is available on the product itself.

Ecotoxicity : No data available.
Biodegradability : No data available.
Bioaccumulative potential: No data available.
Mobility in soil : No data available.
PBT and vPvB assessment : No data available.
Other adverse effects : No data available.

SECTION 13 – DISPOSAL CONSIDERATION

Handling for disposal : Handle waste according to recommendations in Section 7.
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.
Packaging : Handle contaminated packaging in the same manner as the product.
RCRA : For disposal of unused or waste material, check with local, state and federal environmental agencies.

SECTION 14 – TRANSPORTATION INFORMATION

Regulatory Information	UN Number	Shipping Name	Class	Packing Group	Label
TDG	None	This product is not regulated according to Canadian TDG regulations.	None	None	None
TDG Additional Information	None				
49 CFR/DOT	None	This product is not regulated according to US DOT regulations.	None	None	None
49 CFR/DOT Additional Information	None				

Not regulated by IMDG.
Not regulated by IATA.
Not a Marine Pollutant.

SECTION 15 – REGULATORY INFORMATION

Canadian Information:

This product has been classified according to the hazard criteria of the Hazardous Products Regulations (HPR). This SDS contains all information required by the HPR.

Canadian Environmental Protection Act (CEPA) information: All ingredients listed appear on either the Domestic Substances List (DSL) or the Non- Domestic Substances List (NDSL).

US Federal Information:

TSCA: All listed ingredients appear on the Toxic Substances Control Act (TSCA) inventory.

CERCLA Reportable Quantity (RQ) (40 CFR 117.302): None reported.

SARA TITLE III: Sec. 311 and 312, SDS Requirements, 40 CFR 370 Hazard Classes:
 Immediate (Acute) health hazard
 Chronic Health Hazard.

Under SARA Sections 311 and 312, the EPA has established threshold quantities for the reporting of hazardous chemicals. The current thresholds are 500 pounds or the threshold planning quantity (TPQ), whichever is lower, for extremely hazardous substances and 10,000 pounds for all other hazardous chemicals.

SARA TITLE III: Sec. 313, Toxic Chemicals Notification, 40 CFR 372: This material is not subject to SARA notification requirements, since it does not contain any Toxic Chemical constituents above *de minimus* concentrations.

U.S. State Right to Know Laws

California Proposition 65: See product label for information regarding Proposition 65.

Other State Right to Know Laws:

Ingredient on State RTK Law?	CAS #	CA	MA	MN	NJ	NY	PA	RI
Crystalline silica, quartz	14808-60-7	No	YES	YES	YES	No	YES	YES
Portland cement	65997-15-1	No	YES	No	YES	No	YES	YES
Amorphous fumed silica	69012-64-2	No	YES	No	YES	No	No	No

SECTION 16 – OTHER INFORMATION

HMIS Rating : * - Chronic Hazard 0 - Minimal 1 – Slight 2 – Moderate 3 – Serious 4 – Severe
*Health: *3 Flammability 0 Physical Hazard 1 PPE:*
 Gloves, safety glasses

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
 DOT: Department of Transportation
 DSL: Domestic Substances List
 EPA: Environmental Protection Agency
 GHS: Globally Harmonized System
 HEPA: High Efficiency Particulate Air [filter]
 HMIS: Hazardous Materials Information System
 HPR: Hazardous Products Regulations
 IARC: International Agency for Research on Cancer
 Inh: Inhalation
 mg/L: milligrams per Liter (of air)
 mg/kg: milligrams per Kilogram (of body mass)
 N/Av: Not Available
 N/Ap: Not Applicable
 NFPA: National Fire Protection Association
 NIOSH: National Institute of Occupational Safety and Health
 NTP: National Toxicology Program
 OSHA: Occupational Safety and Health Administration
 PBT: Persistent, Bioaccumulative, and/or Toxic
 PEL: Permissible exposure limit
 PPE: Personal Protection Equipment
 RCRA: Resource Conservation and Recovery Act
 SARA: Superfund Amendments and Reauthorization Act
 STEL: Short Term Exposure Limit
 TDG: Canadian Transportation of Dangerous Goods Act & Regulations
 TLV: Threshold Limit Values
 TSCA: Toxic Substance Control Act
 TWA: Time Weighted Average
 vPvB: (very) Persistent, (very) Bioaccumulative and/or Toxic
 WHMIS: Workplace Hazardous Materials Identification System

Disclaimer of Liability

The Information presented herein is supplied as a guide to those who handle or use this product and has been prepared in good faith by technically knowledgeable personnel. It is not intended to be all-inclusive. The manner and conditions of use and handling may involve other and additional considerations. Safe work practices must be employed when working with any materials. It is important that the end user determines the adequacy of the safety procedures employed during the use of this product. No warranty of any kind is given or implied. ARDEX L.P. will not be liable for any damages, losses, injuries or consequential damages which may result from the use or reliance on any information contained herein.

Prepared By:
ARDEX L.P.
400 Ardex Park Drive
Aliquippa, PA, U.S.A.
15001

(724) 203-5000
Visit our Website: <http://www.ardexamericas.com>

Revision date: : 05-Jul-2019

End of Document

SAFETY DATA SHEET

B70R8101

Section 1. Identification

Product name : ARMORSEAL® 8100 Epoxy - Gloss (Part A)
Safety Red

Product code : B70R8101

Other means of identification : Not available.

Product type : Liquid.

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

Paint or paint related material.

Manufacturer : THE SHERWIN-WILLIAMS COMPANY
101 W. Prospect Avenue
Cleveland, OH 44115

National contact : Sherwin-Williams Canada Inc.
180 Brunel Road
Mississauga, Ontario L4Z 1T5 Canada

Emergency telephone number of the company : US / Canada: (800) 424-9300
Mexico: SETIQ 01-800-00-214-00 / (52) 55-5559-1588 24 hours / 365 days a year

Product Information Telephone Number : US / Canada: (800) 524-5979
Mexico: Not Available

Regulatory Information Telephone Number : US / Canada: (216) 566-2902
Mexico: Not Available

Transportation Emergency Telephone Number : US / Canada: (800) 424-9300
Mexico: SETIQ 01-800-00-214-00 / (52) 55-5559-1588 24 hours / 365 days a year

Section 2. Hazards identification

Classification of the substance or mixture : SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A
SKIN SENSITIZATION - Category 1
CARCINOGENICITY - Category 2

Percentage of the mixture consisting of ingredient(s) of unknown acute oral toxicity: 31.9%

Percentage of the mixture consisting of ingredient(s) of unknown acute dermal toxicity: 31.9%

Percentage of the mixture consisting of ingredient(s) of unknown acute inhalation toxicity: 31.9%

GHS label elements

Hazard pictograms



Signal word : Warning

Section 2. Hazards identification

- Hazard statements** : Causes serious eye irritation.
May cause an allergic skin reaction.
Suspected of causing cancer.
- 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. Avoid breathing vapor. Wash hands thoroughly after handling. Contaminated work clothing must not be allowed out of the workplace.
- Response** : IF exposed or concerned: Get medical attention. IF ON SKIN: Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation or rash 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.
- Disposal** : Dispose of contents and container in accordance with all local, regional, national and international regulations.
- Supplemental label elements** 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. This product must be mixed with other components before use. Before opening the packages, READ AND FOLLOW WARNING LABELS ON ALL COMPONENTS.
This product contains a component that is either subject to a CEPA ministerial condition or an existing/proposed SNAC (Significant New Activity). See Environmental Data Sheet (EDS) for additional detail.

Please refer to the SDS for additional information. Keep out of reach of children. Do not transfer contents to other containers for storage.

- 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
Epoxy Resin	31.92	69761-19-9
Titanium Dioxide	1.47	13463-67-7
Polypropylene glycol alkyl phenyl ether	0.92	9064-13-5

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

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 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 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. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
- Skin contact** : Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : 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. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. 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** : No known significant effects or critical hazards.
- Skin contact** : May cause an allergic skin reaction.
- Ingestion** : No known significant effects or critical hazards.

Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following:
pain or irritation
watering
redness
- Inhalation** : No specific data.
- Skin contact** : Adverse symptoms may include the following:
irritation
redness
- Ingestion** : No specific data.

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

- Notes to physician** : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
- Specific treatments** : No specific treatment.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

Section 4. First aid measures

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 : In a fire or if heated, a pressure increase will occur and the container may burst.

Hazardous thermal decomposition products : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
nitrogen oxides
halogenated compounds
metal oxide/oxides

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.

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. Do not touch or walk through spilled material. 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 : **This product contains a component that is either subject to a CEPA ministerial condition or an existing/proposed SNAC (Significant New Activity). See Environmental Data Sheet (EDS) for additional detail.**

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).

Methods and materials for containment and cleaning up

Small spill : Stop leak if without risk. Move containers from spill area. 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.

Section 6. Accidental release measures

Large spill : Stop leak if without risk. Move containers from spill area. 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). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Avoid exposure - obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapor or mist. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

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.

Conditions for safe storage, including any incompatibilities : Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. 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	CAS #	Exposure limits
Epoxy Resin Titanium Dioxide	69761-19-9 13463-67-7	None. ACGIH TLV (United States, 3/2019). TWA: 10 mg/m ³ 8 hours. OSHA PEL (United States, 5/2018). TWA: 15 mg/m ³ 8 hours. Form: Total dust
Polypropylene glycol alkyl phenyl ether	9064-13-5	None.

Occupational exposure limits (Canada)

Section 8. Exposure controls/personal protection

Ingredient name	CAS #	Exposure limits
Titanium dioxide	13463-67-7	<p>CA British Columbia Provincial (Canada, 5/2019). TWA: 3 mg/m³ 8 hours. Form: Respirable dust</p> <p>TWA: 10 mg/m³ 8 hours. Form: Total dust</p> <p>CA Quebec Provincial (Canada, 1/2014). TWAEV: 10 mg/m³ 8 hours. Form: Total dust.</p> <p>CA Alberta Provincial (Canada, 6/2018). 8 hrs OEL: 10 mg/m³ 8 hours.</p> <p>CA Ontario Provincial (Canada, 1/2018). TWA: 10 mg/m³ 8 hours.</p> <p>CA Saskatchewan Provincial (Canada, 7/2013). STEL: 20 mg/m³ 15 minutes. TWA: 10 mg/m³ 8 hours.</p>

Occupational exposure limits (Mexico)

Ingredient name	CAS #	Exposure limits
None.		

- Appropriate engineering controls** : If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.
- Environmental exposure controls** : **This product contains a component that is either subject to a CEPA ministerial condition or an existing/proposed SNAC (Significant New Activity). See Environmental Data Sheet (EDS) for additional detail.**

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. Contaminated work clothing should not be allowed out of the workplace. 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**
- Hand protection** : 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.

Section 8. Exposure controls/personal protection

- Body protection** : 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.
- Other skin protection** : 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.
- Respiratory protection** : 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

- Physical state** : Liquid.
- Color** : Red.
- Odor** : Not available.
- Odor threshold** : Not available.
- pH** : 9
- Melting point/freezing point** : Not available.
- Boiling point/boiling range** : 100°C (212°F)
- Flash point** : Closed cup: Not applicable.
- Evaporation rate** : 0.09 (butyl acetate = 1)
- Flammability (solid, gas)** : Not available.
- Lower and upper explosive (flammable) limits** : Not available.
- Vapor pressure** : 2.3 kPa (17.5 mm Hg) [at 20°C]
- Vapor density** : 1 [Air = 1]
- Relative density** : 1.07
- Solubility** : Not available.
- Partition coefficient: n-octanol/water** : Not available.
- Auto-ignition temperature** : Not available.
- Decomposition temperature** : Not available.
- Viscosity** : Kinematic (40°C (104°F)): >0.205 cm²/s (>20.5 cSt)
- Molecular weight** : Not applicable.
- Aerosol product**
- Heat of combustion** : 2.061 kJ/g

Section 10. Stability and reactivity

- Reactivity** : No specific test data related to reactivity available for this product or its ingredients.
- Chemical stability** : The product is stable.
- Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.
- Conditions to avoid** : No specific data.

Section 10. Stability and reactivity

Incompatible materials : No specific data.

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

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Not available.

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Titanium Dioxide	Skin - Mild irritant	Human	-	72 hours 300 ug l	-

Sensitization

Not available.

Mutagenicity

Not available.

Carcinogenicity

Not available.

Classification

Product/ingredient name	OSHA	IARC	NTP
Titanium Dioxide	-	2B	-

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on the likely routes of exposure : Not available.

Potential acute health effects

- Eye contact** : Causes serious eye irritation.
- Inhalation** : No known significant effects or critical hazards.
- Skin contact** : May cause an allergic skin reaction.
- Ingestion** : No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Section 11. Toxicological information

- Eye contact** : Adverse symptoms may include the following:
pain or irritation
watering
redness
- Inhalation** : No specific data.
- Skin contact** : Adverse symptoms may include the following:
irritation
redness
- Ingestion** : No specific data.

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** : Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.
- Carcinogenicity** : Suspected of causing cancer. Risk of cancer depends on duration and level of exposure.
- 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** : No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Not available.

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
Titanium Dioxide	Acute LC50 >1000000 µg/l Marine water	Fish - Fundulus heteroclitus	96 hours

Persistence and degradability

Not available.

Bioaccumulative potential

Not available.

Section 12. Ecological information

Mobility in soil

Soil/water partition coefficient (K_{oc}) : Not available.

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

Section 13. Disposal considerations

Disposal methods : This product contains a component that is either subject to a CEPA ministerial condition or an existing/proposed SNAC (Significant New Activity). See Environmental Data Sheet (EDS) for additional detail.

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. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	DOT Classification	TDG Classification	Mexico Classification	IATA	IMDG
UN number	Not regulated.	Not regulated.	Not regulated.	Not regulated.	Not regulated.
UN proper shipping name	-	-	-	-	-
Transport hazard class(es)	-	-	-	-	-
Packing group	-	-	-	-	-
Environmental hazards	No.	No.	No.	No.	No.
Additional information	-	-	-	-	-

Section 14. Transport information

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

U.S. Federal regulations : **TSCA 5(a)2 proposed significant new use rules:** 5-Chloro-2-methylisothiazolinone
TSCA 5(a)2 final significant new use rules: Sodium Nitrite
This product contains a component that is either subject to a CEPA ministerial condition or an existing/proposed SNAC (Significant New Activity). See Environmental Data Sheet (EDS) for additional detail.

International regulations

International lists

: **Australia inventory (AICS):** Not determined.
China inventory (IECSC): Not determined.
Japan inventory (ENCS): Not determined.
Japan inventory (ISHL): Not determined.
Korea inventory (KECI): Not determined.
New Zealand Inventory of Chemicals (NZIoC): Not determined.
Philippines inventory (PICCS): Not determined.
Taiwan Chemical Substances Inventory (TCSI): Not determined.
Thailand inventory: Not determined.
Turkey inventory: Not determined.
Vietnam inventory: Not determined.

Section 16. Other information

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

Health	*	3
Flammability		0
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.

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

Section 16. Other information

Classification	Justification
SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A	Calculation method
SKIN SENSITIZATION - Category 1	Calculation method
CARCINOGENICITY - Category 2	Calculation method

History

Date of printing : 5/22/2020

Date of issue/Date of revision : 5/22/2020

Date of previous issue : 5/14/2020

Version : 9.02

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)
- N/A = Not available
- SGG = Segregation Group
- UN = United Nations

Indicates information that has changed from previously issued version.

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 the manufacturer, including but not limited to the incorporation of products not specified by the manufacturer, or the use or addition of products in proportions not specified by the manufacturer. 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.

SAFETY DATA SHEET

B70W8161

Section 1. Identification

Product name : ARMORSEAL® 8100 Epoxy - Satin (Part A)
Extra White

Product code : B70W8161

Other means of identification : Not available.

Product type : Liquid.

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

Paint or paint related material.

Manufacturer : THE SHERWIN-WILLIAMS COMPANY
101 W. Prospect Avenue
Cleveland, OH 44115

Emergency telephone number of the company : US / Canada: (800) 424-9300
Mexico: SETIQ 01-800-00-214-00 / (52) 55-5559-1588 24 hours / 365 days a year

Product Information Telephone Number : US / Canada: (800) 524-5979
Mexico: Not Available

Regulatory Information Telephone Number : US / Canada: (216) 566-2902
Mexico: Not Available

Transportation Emergency Telephone Number : US / Canada: (800) 424-9300
Mexico: SETIQ 01-800-00-214-00 / (52) 55-5559-1588 24 hours / 365 days a year

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 : SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A
SKIN SENSITIZATION - Category 1
CARCINOGENICITY - Category 2

Percentage of the mixture consisting of ingredient(s) of unknown acute toxicity: 27% (oral), 27% (dermal), 27% (inhalation)

GHS label elements

Hazard pictograms



Signal word

: Warning

Hazard statements

: May cause an allergic skin reaction.
Causes serious eye irritation.
Suspected of causing cancer.

Precautionary statements

Date of issue/Date of revision : 6/26/2020	Date of previous issue : 5/22/2020	Version : 17	1/12
B70W8161	ARMORSEAL® 8100 Epoxy - Satin (Part A) Extra White	SHW-85-NA-GHS-US	

Section 2. Hazards identification

- Prevention** : Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves, protective clothing and eye or face protection. Avoid breathing vapor. Wash thoroughly after handling. Contaminated work clothing must not be allowed out of the workplace.
- Response** : IF exposed or concerned: Get medical advice or attention. Wash contaminated clothing before reuse. IF ON SKIN: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice or 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 advice or attention.
- Storage** : Store locked up.
- Disposal** : Dispose of contents and container in accordance with all local, regional, national and international regulations.
- Supplemental label elements** 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. Contains Formaldehyde - a potential cancer hazard. This product must be mixed with other components before use. Before opening the packages, READ AND FOLLOW WARNING LABELS ON ALL COMPONENTS.
- This product contains a Significant New Use Rule (SNUR) Chemical. Do not allow this product to enter drains, sewers, wastewater treatment systems, groundwater, streams, lakes or ponds. See Environmental Data Sheet (EDS) for additional details.
- Please refer to the SDS for additional information. Keep out of reach of children. Do not transfer contents to other containers for storage.
- 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
Epoxy Resin	≥25 - ≤50	69761-19-9
Titanium Dioxide	≥10 - ≤25	13463-67-7
Polypropylene glycol alkyl phenyl ether	≤1	9064-13-5

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

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 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 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.

Section 4. First aid measures

- Skin contact** : Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : 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. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. 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** : No known significant effects or critical hazards.
- Skin contact** : May cause an allergic skin reaction.
- Ingestion** : No known significant effects or critical hazards.

Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following:
pain or irritation
watering
redness
- Inhalation** : No specific data.
- Skin contact** : Adverse symptoms may include the following:
irritation
redness
- Ingestion** : No specific data.

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. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

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** : In a fire or if heated, a pressure increase will occur and the container may burst.

Section 5. Fire-fighting measures

- Hazardous thermal decomposition products** : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
metal oxide/oxides
- 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.
- 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. Do not touch or walk through spilled material. 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** : **This product contains a Significant New Use Rule (SNUR) Chemical. Do not allow this product to enter drains, sewers, wastewater treatment systems, groundwater, streams, lakes or ponds. See Environmental Data Sheet (EDS) for additional details.**

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).

Methods and materials for containment and cleaning up

- Small spill** : Stop leak if without risk. Move containers from spill area. 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. 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). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Avoid exposure - obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapor or mist. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers

Section 7. Handling and storage

retain product residue and can be hazardous. Do not reuse container.

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.

Conditions for safe storage, including any incompatibilities

: Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. 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	CAS #	Exposure limits
Epoxy Resin Titanium Dioxide	69761-19-9 13463-67-7	None. ACGIH TLV (United States, 3/2019). TWA: 10 mg/m ³ 8 hours. OSHA PEL (United States, 5/2018). TWA: 15 mg/m ³ 8 hours. Form: Total dust
Polypropylene glycol alkyl phenyl ether	9064-13-5	None.

Occupational exposure limits (Canada)

Ingredient name	CAS #	Exposure limits
Titanium dioxide	13463-67-7	CA British Columbia Provincial (Canada, 5/2019). TWA: 3 mg/m ³ 8 hours. Form: Respirable dust TWA: 10 mg/m ³ 8 hours. Form: Total dust CA Quebec Provincial (Canada, 1/2014). TWA: 10 mg/m ³ 8 hours. Form: Total dust. CA Alberta Provincial (Canada, 6/2018). 8 hrs OEL: 10 mg/m ³ 8 hours. CA Ontario Provincial (Canada, 1/2018). TWA: 10 mg/m ³ 8 hours. CA Saskatchewan Provincial (Canada, 7/2013). STEL: 20 mg/m ³ 15 minutes. TWA: 10 mg/m ³ 8 hours.

Occupational exposure limits (Mexico)

	CAS #	Exposure limits
None.		

Appropriate engineering controls

: If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

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B70W8161

ARMORSEAL® 8100 Epoxy - Satin (Part A)
Extra White

SHW-85-NA-GHS-US

Section 8. Exposure controls/personal protection

Environmental exposure controls : This product contains a Significant New Use Rule (SNUR) Chemical. Do not allow this product to enter drains, sewers, wastewater treatment systems, groundwater, streams, lakes or ponds. See Environmental Data Sheet (EDS) for additional details.

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

Hand protection : 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.

Body protection : 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.

Other skin protection : 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.

Respiratory protection : 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

Physical state : Liquid.
Color : Not available.
Odor : Not available.
Odor threshold : Not available.
pH : 9
Melting point/freezing point : Not available.
Boiling point/boiling range : 100°C (212°F)
Flash point : Closed cup: Not applicable.
Evaporation rate : 0.09 (butyl acetate = 1)
Flammability (solid, gas) : Not available.
Lower and upper explosive (flammable) limits : Not available.

Section 9. Physical and chemical properties

Vapor pressure : 2.3 kPa (17.5 mm Hg) [at 20°C]
Vapor density : 1 [Air = 1]
Relative density : 1.25
Solubility : Not available.
Partition coefficient: n-octanol/water : Not available.
Auto-ignition temperature : Not available.
Decomposition temperature : Not available.
Viscosity : Kinematic (40°C (104°F)): >0.205 cm²/s (>20.5 cSt)
Molecular weight : Not applicable.
Aerosol product
Heat of combustion : 1.787 kJ/g

Section 10. Stability and reactivity

Reactivity : No specific test data related to reactivity available for this product or its ingredients.
Chemical stability : The product is stable.
Possibility of hazardous reactions : Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid : No specific data.
Incompatible materials : No specific data.
Hazardous decomposition products : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Not available.

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Titanium Dioxide	Skin - Mild irritant	Human	-	72 hours 300 ug l	-

Sensitization

Not available.

Mutagenicity

Not available.

Carcinogenicity

Not available.

Classification

Section 11. Toxicological information

Product/ingredient name	OSHA	IARC	NTP
Titanium Dioxide	-	2B	-

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on the likely routes of exposure : Not available.

Potential acute health effects

- Eye contact** : Causes serious eye irritation.
- Inhalation** : No known significant effects or critical hazards.
- Skin contact** : May cause an allergic skin reaction.
- Ingestion** : No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

- Eye contact** : Adverse symptoms may include the following:
 - pain or irritation
 - watering
 - redness
- Inhalation** : No specific data.
- Skin contact** : Adverse symptoms may include the following:
 - irritation
 - redness
- Ingestion** : No specific data.

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 : Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.

Section 11. Toxicological information

- Carcinogenicity** : Suspected of causing cancer. Risk of cancer depends on duration and level of exposure.
- 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** : No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Not available.

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
Titanium Dioxide	Acute LC50 >1000000 µg/l Marine water	Fish - Fundulus heteroclitus	96 hours

Persistence and degradability

Not available.

Bioaccumulative potential

Not available.

Mobility in soil

- Soil/water partition coefficient (K_{oc})** : Not available.

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

Section 13. Disposal considerations

- Disposal methods** : **This product contains a Significant New Use Rule (SNUR) Chemical. Do not allow this product to enter drains, sewers, wastewater treatment systems, groundwater, streams, lakes or ponds. See Environmental Data Sheet (EDS) for additional details.**

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. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	DOT Classification	TDG Classification	Mexico Classification	IATA	IMDG
UN number	Not regulated.	Not regulated.	Not regulated.	Not regulated.	Not regulated.
UN proper shipping name	-	-	-	-	-
Transport hazard class(es)	-	-	-	-	-
Packing group	-	-	-	-	-
Environmental hazards	No.	No.	No.	No.	No.
Additional information	-	-	-	-	-

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 IMO instruments : Not available.

Proper shipping name : Not available.

Section 15. Regulatory information

U.S. Federal regulations : **TSCA 5(a)2 proposed significant new use rules:** 5-Chloro-2-methylisothiazolinone
TSCA 5(a)2 final significant new use rules: Sodium Nitrite
 This product contains a Significant New Use Rule (SNUR) Chemical. Do not allow this product to enter drains, sewers, wastewater treatment systems, groundwater, streams, lakes or ponds. See Environmental Data Sheet (EDS) for additional details.

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.

International regulations

Section 15. Regulatory information

International lists :

- Australia inventory (AICS):** Not determined.
- China inventory (IECSC):** Not determined.
- Japan inventory (ENCS):** Not determined.
- Japan inventory (ISHL):** Not determined.
- Korea inventory (KECI):** Not determined.
- New Zealand Inventory of Chemicals (NZIoC):** Not determined.
- Philippines inventory (PICCS):** Not determined.
- Taiwan Chemical Substances Inventory (TCSI):** Not determined.
- Thailand inventory:** Not determined.
- Turkey inventory:** Not determined.
- Vietnam inventory:** Not determined.

Section 16. Other information

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

Health	*	3
Flammability		0
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.

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
SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A SKIN SENSITIZATION - Category 1 CARCINOGENICITY - Category 2	Calculation method Calculation method Calculation method

History

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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)
- N/A = Not available
- SGG = Segregation Group
- UN = United Nations

▀ Indicates information that has changed from previously issued version.

Notice to reader

Section 16. Other information

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 the manufacturer, including but not limited to the incorporation of products not specified by the manufacturer, or the use or addition of products in proportions not specified by the manufacturer. 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.

SAFETY DATA SHEET

B65W220

Section 1. Identification

Product name : ArmorSeal® Hi-Solids Polyurethane Floor Enamel (Part A)
Extra White

Product code : B65W220

Other means of identification : Not available.

Product type : Liquid.

Relevant identified uses of the substance or mixture and uses advised against
Not applicable.

Manufacturer : THE SHERWIN-WILLIAMS COMPANY
101 PROSPECT AVENUE, NW
CLEVELAND, OHIO 44115

Emergency telephone number of the company : (216) 566-2917

Product Information Telephone Number : (800) 524-5979

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 LIQUIDS - Category 3
ACUTE TOXICITY (inhalation) - Category 3
SKIN CORROSION/IRRITATION - Category 2
SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A
CARCINOGENICITY - Category 1A
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2
Percentage of the mixture consisting of ingredient(s) of unknown toxicity: 64.1%

GHS label elements

Hazard pictograms :



Signal word : Danger

Hazard statements : Flammable liquid and vapor.
Toxic if inhaled.
Causes serious eye irritation.
Causes skin irritation.
May cause cancer.
May cause damage to organs through prolonged or repeated exposure.

Precautionary statements

Section 2. Hazards identification

Prevention	: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Wear protective gloves. Wear eye or face protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use explosion-proof electrical, ventilating, lighting and all material-handling equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Keep container tightly closed. Use only outdoors or in a well-ventilated area. Do not breathe vapor. Wash hands thoroughly after handling.
Response	: Get medical attention if you feel unwell. IF exposed or concerned: Get medical attention. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or physician. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing. 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. Store in a well-ventilated place. Keep cool.
Disposal	Dispose of contents and container in accordance with all local, regional, national and international regulations.
Supplemental label elements	<p>Adequate ventilation required when sanding or abrading the dried film. If Adequate ventilation cannot be provided wear an approved particulate respirator (NIOSH approved). Follow respirator manufacturer's directions for respirator use. DELAYED EFFECTS FROM LONG TERM OVEREXPOSURE. Abrading or sanding of the dry film may release crystalline silica which has been shown to cause lung damage and cancer under long term exposure. 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. This product must be mixed with other components before use. Before opening the packages, READ AND FOLLOW WARNING LABELS ON ALL COMPONENTS.</p> <p>Please refer to the SDS for additional information. Do not transfer contents to other containers for storage.</p>
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
Quartz	16.6	14808-60-7
Titanium Dioxide	16.3	13463-67-7
n-Butyl Acetate	11.0	123-86-4
Methyl n-Amyl Ketone	5.6	110-43-0

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 or the environment 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. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : 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. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. 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** : Toxic if inhaled.
- Skin contact** : Causes skin irritation.
- Ingestion** : Irritating to mouth, throat and stomach.

Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following:
pain or irritation
watering
redness
- Inhalation** : No specific data.
- Skin contact** : Adverse symptoms may include the following:
irritation
redness
- Ingestion** : No specific data.

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. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media : Use dry chemical, CO₂, water spray (fog) or foam.

Unsuitable extinguishing media : Do not use water jet.

Specific hazards arising from the chemical : Flammable liquid and vapor. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. The vapor/gas is heavier than air and will spread along the ground. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Runoff to sewer may create fire or explosion hazard.

Hazardous thermal decomposition products : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
metal oxide/oxides

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. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders : If specialised 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).

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). Avoid exposure - obtain special instructions before use. 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 ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. 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. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.

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.

Conditions for safe storage, including any incompatibilities : Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
Quartz	<p>OSHA PEL Z3 (United States, 2/2013). TWA: 250 MPPCF / (%SiO₂+5) 8 hours. Form: Respirable</p> <p>TWA: 10 MG/M³ / (%SiO₂+2) 8 hours. Form: Respirable</p> <p>ACGIH TLV (United States, 4/2014). TWA: 0.025 mg/m³ 8 hours. Form: Respirable fraction</p> <p>NIOSH REL (United States, 10/2013). TWA: 0.05 mg/m³ 10 hours. Form: respirable dust</p>
Titanium Dioxide	<p>ACGIH TLV (United States, 4/2014). TWA: 10 mg/m³ 8 hours.</p> <p>OSHA PEL (United States, 2/2013). TWA: 15 mg/m³ 8 hours. Form: Total dust</p>
n-Butyl Acetate	<p>ACGIH TLV (United States, 4/2014). TWA: 150 ppm 8 hours. STEL: 200 ppm 15 minutes.</p> <p>NIOSH REL (United States, 10/2013). TWA: 150 ppm 10 hours. TWA: 710 mg/m³ 10 hours. STEL: 200 ppm 15 minutes. STEL: 950 mg/m³ 15 minutes.</p> <p>OSHA PEL (United States, 2/2013). TWA: 150 ppm 8 hours. TWA: 710 mg/m³ 8 hours.</p>

Section 8. Exposure controls/personal protection

Methyl n-Amyl Ketone

ACGIH TLV (United States, 4/2014).

TWA: 50 ppm 8 hours.

TWA: 233 mg/m³ 8 hours.

NIOSH REL (United States, 10/2013).

TWA: 100 ppm 10 hours.

TWA: 465 mg/m³ 10 hours.

OSHA PEL (United States, 2/2013).

TWA: 100 ppm 8 hours.

TWA: 465 mg/m³ 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

Hand protection

: 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.

Body protection

: 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.

Other skin protection

: 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.

Respiratory protection

: Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Section 9. Physical and chemical properties

Appearance

Physical state	: Liquid.
Color	: Not available.
Odor	: Not available.
Odor threshold	: Not available.
pH	: Not available.
Melting point	: Not available.
Boiling point	: 123°C (253.4°F)
Flash point	: Closed cup: 39°C (102.2°F) [Pensky-Martens Closed Cup]
Evaporation rate	: 1 (butyl acetate = 1)
Flammability (solid, gas)	: Not available.
Lower and upper explosive (flammable) limits	: Lower: 1.1% Upper: 13.1%
Vapor pressure	: 0.18 kPa (1.333 mm Hg) [at 20°C]
Vapor density	: 3.94 [Air = 1]
Relative density	: 1.34
Solubility	: Not available.
Partition coefficient: n-octanol/water	: Not available.
Auto-ignition temperature	: Not available.
Decomposition temperature	: Not available.
Viscosity	: Kinematic (room temperature): >0.07 cm ² /s (>7 cSt) Kinematic (40°C (104°F)): >0.07 cm ² /s (>7 cSt)

Aerosol product

Heat of combustion : 0.000007272 kJ/g

Section 10. Stability and reactivity

Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	: The product is stable.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Do not allow vapor to accumulate in low or confined areas.
Incompatible materials	: Reactive or incompatible with the following materials: oxidizing materials
Hazardous decomposition products	: 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
n-Butyl Acetate	LC50 Inhalation Gas.	Rat	390 ppm	4 hours
	LD50 Dermal	Rabbit	>17600 mg/kg	-
Methyl n-Amyl Ketone	LD50 Oral	Rat	10768 mg/kg	-
	LD50 Oral	Rat	1600 mg/kg	-

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Titanium Dioxide	Skin - Mild irritant	Human	-	72 hours 300 Micrograms Intermittent	-
n-Butyl Acetate	Eyes - Moderate irritant	Rabbit	-	100 milligrams	-
	Skin - Moderate irritant	Rabbit	-	24 hours 500 milligrams	-
Methyl n-Amyl Ketone	Skin - Mild irritant	Rabbit	-	24 hours 14 milligrams	-

Sensitization

Not available.

Mutagenicity

Not available.

Carcinogenicity

Not available.

Classification

Product/ingredient name	OSHA	IARC	NTP
Quartz	-	1	Known to be a human carcinogen.
Titanium Dioxide	-	2B	-

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
Methyl n-Amyl Ketone	Category 3	Not applicable.	Respiratory tract irritation and Narcotic effects

Specific target organ toxicity (repeated exposure)

Name	Category	Route of exposure	Target organs
Methyl n-Amyl Ketone	Category 2	Not determined	Not determined

Aspiration hazard

Not available.

Information on the likely routes of exposure : Not available.

Potential acute health effects

Eye contact : Causes serious eye irritation.
Inhalation : Toxic if inhaled.
Skin contact : Causes skin irritation.
Ingestion : Irritating to mouth, throat and stomach.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : Adverse symptoms may include the following:
pain or irritation
watering
redness
Inhalation : No specific data.
Skin contact : Adverse symptoms may include the following:
irritation
redness
Ingestion : No specific data.

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 : May cause cancer. Risk of cancer depends on duration and level of exposure.
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 : No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Route	ATE value
Oral	10174.6 mg/kg
Inhalation (gases)	1278.7 ppm

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
Titanium Dioxide	Acute LC50 >1000000 µg/l Marine water	Fish - Fundulus heteroclitus	96 hours
n-Butyl Acetate	Acute LC50 32000 µg/l Marine water	Crustaceans - Artemia salina - Nauplii	48 hours
Methyl n-Amyl Ketone	Acute LC50 18000 µg/l Fresh water	Fish - Pimephales promelas	96 hours
	Acute LC50 131000 µg/l Fresh water	Fish - Pimephales promelas	96 hours

Persistence and degradability

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
n-Butyl Acetate	-	-	Readily
Methyl n-Amyl Ketone	-	-	Readily

Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
Titanium Dioxide	-	352	low

Mobility in soil

Soil/water partition coefficient (K_{oc}) : 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. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	DOT Classification	TDG Classification	Mexico Classification	IATA	IMDG
UN number	Not regulated.	Not regulated.	UN1263	UN1263	UN1263
UN proper shipping name	-	-	PAINT	PAINT	PAINT

Date of issue/Date of revision : 3/24/2015. Date of previous issue : No previous validation. Version : 1 10/12

Section 14. Transport information

Transport hazard class(es)	-	-	3 	3 	3 
Packing group	-	-	III	III	III
Environmental hazards	No.	No.	No.	No.	No.
Additional information	<u>Special provisions</u> Not Applicable	<u>Special provisions</u> Not Applicable	<u>Special provisions</u> (ERG#128)	<u>Special provisions</u> Not Applicable	<u>Emergency schedules (EmS)</u> F-E, S-E

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 : Not available.
to Annex II of MARPOL
73/78 and the IBC Code

Section 15. Regulatory information

U.S. Federal regulations :

State regulations

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		2
Physical hazards		0

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 are not required on SDSs 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 mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

The customer is responsible for determining the PPE code for this material.

Section 16. Other information

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. 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.

SAFETY DATA SHEET

B65V220

Section 1. Identification

Product name : ArmorSeal® Hi-Solids Polyurethane Floor Enamel (Part B)
Hardener

Product code : B65V220

Other means of identification : Not available.

Product type : Liquid.

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

Not applicable.

Manufacturer : THE SHERWIN-WILLIAMS COMPANY
101 PROSPECT AVENUE, NW
CLEVELAND, OHIO 44115

Emergency telephone number of the company : (216) 566-2917

Product Information Telephone Number : (800) 524-5979

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 LIQUIDS - Category 3
ACUTE TOXICITY (inhalation) - Category 4
SKIN CORROSION/IRRITATION - Category 2
SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A
RESPIRATORY SENSITIZATION - Category 1
SKIN SENSITIZATION - Category 1
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3

GHS label elements

Hazard pictograms :



Signal word : Danger

Hazard statements : Flammable liquid and vapor.
Harmful if inhaled.
Causes serious eye irritation.
Causes skin irritation.
May cause allergy or asthma symptoms or breathing difficulties if inhaled.
May cause an allergic skin reaction.
May cause respiratory irritation.

Precautionary statements

Date of issue/Date of revision : 3/24/2015. **Date of previous issue** : No previous validation. **Version** : 1 1/12

Section 2. Hazards identification

Prevention	: Wear protective gloves. Wear eye or face protection. In case of inadequate ventilation wear respiratory protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use explosion-proof electrical, ventilating, lighting and all material-handling equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Keep container tightly closed. Use only outdoors or in a well-ventilated area. Avoid breathing vapor. Wash hands thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace.
Response	: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or physician if you feel unwell. If experiencing respiratory symptoms: Call a POISON CENTER or physician. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing. If skin irritation or rash 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. Store in a well-ventilated place. Keep cool.
Disposal	Dispose of contents and container in accordance with all local, regional, national and international regulations.
Supplemental label elements	VAPOR AND SPRAY MIST HARMFUL. Gives off harmful vapor of solvents and isocyanates. DO NOT USE IF YOU HAVE CHRONIC (LONG-TERM) LUNG OR BREATHING PROBLEMS, OR IF YOU HAVE EVER HAD A REACTION TO ISOCYANATES. USE ONLY WITH ADEQUATE VENTILATION. WHERE OVERSPRAY IS PRESENT, A POSITIVE PRESSURE AIR SUPPLIED RESPIRATOR (NIOSH approved) SHOULD BE WORN TO PREVENT EXPOSURE. IF UNAVAILABLE, AN APPROPRIATE PROPERLY FITTED APPROVED NIOSH VAPOR/PARTICULATE RESPIRATOR MAY BE EFFECTIVE. Follow directions for respirator use. Wear the respirator for the whole time of spraying and until all vapors and mists are gone. If you have any breathing problems during use, LEAVE THE AREA and get fresh air. If problems remain or happen later, IMMEDIATELY call a doctor - If not available get emergency medical treatment. Have this label with you. 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. FOR INDUSTRIAL USE ONLY. This product must be mixed with other components before use. Before opening the packages, READ AND FOLLOW WARNING LABELS ON ALL COMPONENTS. Please refer to the SDS for additional information. Do not transfer contents to other containers for storage.
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
Hexamethylene Diisocyanate Polymer	89.9	28182-81-2
n-Butyl Acetate	10.0	123-86-4
Hexamethylene Diisocyanate (max.)	0.1	822-06-0

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 or the environment and hence require reporting in this section.

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

Date of issue/Date of revision	: 3/24/2015.	Date of previous issue	: No previous validation.	Version	: 1	2/12
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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. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours. In the event of any complaints or symptoms, avoid further exposure.
- Skin contact** : Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : 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. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. 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** : Harmful if inhaled. May cause respiratory irritation. May cause allergy or asthma symptoms or breathing difficulties if inhaled. Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.
- Skin contact** : Causes skin irritation. May cause an allergic skin reaction.
- Ingestion** : Irritating to mouth, throat and stomach.

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
wheezing and breathing difficulties
asthma
- Skin contact** : Adverse symptoms may include the following:
irritation
redness
- Ingestion** : No specific data.

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

Section 4. First aid measures

- Notes to physician** : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
- 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. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media : Use dry chemical, CO₂, water spray (fog) or foam.

Unsuitable extinguishing media : Do not use water jet.

Specific hazards arising from the chemical : Flammable liquid and vapor. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. The vapor/gas is heavier than air and will spread along the ground. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Runoff to sewer may create fire or explosion hazard.

Hazardous thermal decomposition products : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
nitrogen oxides

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. 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 specialised 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).

Methods and materials for containment and cleaning up

Section 6. Accidental release measures

- 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). Persons with a history of skin sensitization problems or asthma, allergies or chronic or recurrent respiratory disease should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapor or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. 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. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.
- 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.
- Conditions for safe storage, including any incompatibilities** : Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
n-Butyl Acetate	ACGIH TLV (United States, 4/2014). TWA: 150 ppm 8 hours. STEL: 200 ppm 15 minutes. NIOSH REL (United States, 10/2013). TWA: 150 ppm 10 hours. TWA: 710 mg/m ³ 10 hours. STEL: 200 ppm 15 minutes. STEL: 950 mg/m ³ 15 minutes. OSHA PEL (United States, 2/2013).

Section 8. Exposure controls/personal protection

Hexamethylene Diisocyanate (max.)

TWA: 150 ppm 8 hours.
 TWA: 710 mg/m³ 8 hours.
ACGIH TLV (United States, 4/2014).
 TWA: 0.005 ppm 8 hours.
 TWA: 0.03 mg/m³ 8 hours.
NIOSH REL (United States, 10/2013).
 TWA: 0.005 ppm 10 hours.
 TWA: 0.035 mg/m³ 10 hours.
 CEIL: 0.02 ppm 10 minutes.
 CEIL: 0.14 mg/m³ 10 minutes.
OSHA PEL (United States, 2/2013).
Absorbed through skin.
 TWA: 5 mg/m³, (as CN) 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. Contaminated work clothing should not be allowed out of the workplace. 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

Hand protection : 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.

Body protection : 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.

Other skin protection : 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.

Respiratory protection : Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Section 9. Physical and chemical properties

Appearance

Physical state	: Liquid.
Color	: Not available.
Odor	: Not available.
Odor threshold	: Not available.
pH	: Not available.
Melting point	: Not available.
Boiling point	: 123°C (253.4°F)
Flash point	: Closed cup: 57°C (134.6°F) [Pensky-Martens Closed Cup]
Evaporation rate	: 1 (butyl acetate = 1)
Flammability (solid, gas)	: Not available.
Lower and upper explosive (flammable) limits	: Lower: 1.38% Upper: 7.6%
Vapor pressure	: 0.18 kPa (1.333 mm Hg) [at 20°C]
Vapor density	: 4 [Air = 1]
Relative density	: 1.13
Solubility	: Not available.
Partition coefficient: n-octanol/water	: Not available.
Auto-ignition temperature	: Not available.
Decomposition temperature	: Not available.
Viscosity	: Kinematic (room temperature): >0.07 cm ² /s (>7 cSt) Kinematic (40°C (104°F)): >0.07 cm ² /s (>7 cSt)

Aerosol product

Heat of combustion	: 0.000002819 kJ/g
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Section 10. Stability and reactivity

Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	: The product is stable.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Do not allow vapor to accumulate in low or confined areas.
Incompatible materials	: Reactive or incompatible with the following materials: oxidizing materials
Hazardous decomposition products	: 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
Hexamethylene Diisocyanate Polymer	LC50 Inhalation Vapor	Rat	18500 mg/m ³	1 hours
n-Butyl Acetate	LC50 Inhalation Gas. LD50 Dermal LD50 Oral	Rat Rabbit Rat	390 ppm >17600 mg/kg 10768 mg/kg	4 hours - -
Hexamethylene Diisocyanate (max.)	LC50 Inhalation Dusts and mists	Rat	124 mg/m ³	4 hours

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Hexamethylene Diisocyanate Polymer	Eyes - Moderate irritant	Rabbit	-	100 milligrams	-
	Skin - Moderate irritant	Rabbit	-	500 milligrams	-
n-Butyl Acetate	Eyes - Moderate irritant	Rabbit	-	100 milligrams	-
	Skin - Moderate irritant	Rabbit	-	24 hours 500 milligrams	-

Sensitization

Not available.

Mutagenicity

Not available.

Carcinogenicity

Not available.

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
Hexamethylene Diisocyanate Polymer	Category 3	Not applicable.	Respiratory tract irritation
Hexamethylene Diisocyanate (max.)	Category 3	Not applicable.	Respiratory tract irritation

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on the likely routes of exposure : Not available.

Potential acute health effects

- Eye contact : Causes serious eye irritation.
- Inhalation : Harmful if inhaled. May cause respiratory irritation. May cause allergy or asthma symptoms or breathing difficulties if inhaled. Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.
- Skin contact : Causes skin irritation. May cause an allergic skin reaction.
- Ingestion : Irritating to mouth, throat and stomach.

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
 - wheezing and breathing difficulties
 - asthma
- Skin contact : Adverse symptoms may include the following:
 - irritation
 - redness
- Ingestion : No specific data.

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 : Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.
- 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 : No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Route	ATE value
Inhalation (gases)	3900 ppm
Inhalation (vapors)	12.24 mg/l

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
n-Butyl Acetate	Acute LC50 32000 µg/l Marine water	Crustaceans - Artemia salina - Nauplii	48 hours
	Acute LC50 18000 µg/l Fresh water	Fish - Pimephales promelas	96 hours

Persistence and degradability

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
n-Butyl Acetate	-	-	Readily

Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
Hexamethylene Diisocyanate Polymer	-	367.7	low
Hexamethylene Diisocyanate (max.)	-	57.63	low

Mobility in soil

Soil/water partition coefficient (K_{oc}) : 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. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	DOT Classification	TDG Classification	Mexico Classification	IATA	IMDG
UN number	Not regulated.	Not regulated.	UN1263	UN1263	UN1263
UN proper shipping name	-	-	PAINT	PAINT	PAINT

Date of issue/Date of revision : 3/24/2015. Date of previous issue : No previous validation. Version : 1 10/12

Section 14. Transport information

Transport hazard class(es)	-	-	3 	3 	3 
Packing group	-	-	III	III	III
Environmental hazards	No.	No.	No.	No.	No.
Additional information	<u>Special provisions</u> Not Applicable	<u>Special provisions</u> Not Applicable	<u>Special provisions</u> (ERG#128)	<u>Special provisions</u> Not Applicable	<u>Emergency schedules (EmS)</u> F-E, S-E

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 73/78 and the IBC Code : Not available.

Section 15. Regulatory information

U.S. Federal regulations :

State regulations

Section 16. Other information

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

Health	*	2
Flammability		2
Physical hazards		1

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 are not required on SDSs 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 mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

The customer is responsible for determining the PPE code for this material.

Section 16. Other information

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. 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.

SAFETY DATA SHEET

B65T220

Section 1. Identification

Product name : ArmorSeal® Hi-Solids Polyurethane Floor Enamel (Part A)
Ultradeep Base

Product code : B65T220

Other means of identification : Not available.

Product type : Liquid.

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

Paint or paint related material.

Manufacturer : THE SHERWIN-WILLIAMS COMPANY
101 W. Prospect Avenue
Cleveland, OH 44115

Emergency telephone number of the company : US / Canada: (800) 424-9300
Mexico: SETIQ 01-800-00-214-00 / (52) 55-5559-1588 24 hours / 365 days a year

Product Information Telephone Number : US / Canada: (800) 524-5979
Mexico: Not Available

Regulatory Information Telephone Number : US / Canada: (216) 566-2902
Mexico: Not Available

Transportation Emergency Telephone Number : US / Canada: (800) 424-9300
Mexico: SETIQ 01-800-00-214-00 / (52) 55-5559-1588 24 hours / 365 days a year

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 LIQUIDS - Category 3
SKIN CORROSION/IRRITATION - Category 2
SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A
CARCINOGENICITY - Category 1A
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1
Percentage of the mixture consisting of ingredient(s) of unknown acute oral toxicity: 25.3%
Percentage of the mixture consisting of ingredient(s) of unknown acute dermal toxicity: 25.3%
Percentage of the mixture consisting of ingredient(s) of unknown acute inhalation toxicity: 25.3%

GHS label elements

Hazard pictograms :



Date of issue/Date of revision : 5/14/2020 **Date of previous issue** : 3/2/2020

Version : 15.01 1/17

B65T220
ArmorSeal® Hi-Solids Polyurethane Floor Enamel (Part A)
Ultradeep Base

SHW-85-NA-GHS-US

Section 2. Hazards identification

- Signal word** : Danger
- Hazard statements** : Flammable liquid and vapor.
Causes serious eye irritation.
Causes skin irritation.
May cause cancer.
May cause drowsiness or dizziness.
Causes damage to organs through prolonged or repeated exposure.

Precautionary statements

- Prevention** : Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. 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. Use explosion-proof electrical, ventilating, lighting and all material-handling equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Keep container tightly closed. Use only outdoors or in a well-ventilated area. Do not breathe vapor. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling.

- 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 ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. 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. Store in a well-ventilated place. Keep cool.

- 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. This product must be mixed with other components before use. Before opening the packages, READ AND FOLLOW WARNING LABELS ON ALL COMPONENTS. Adequate ventilation required when sanding or abrading the dried film. If Adequate ventilation cannot be provided wear an approved particulate respirator (NIOSH approved). Follow respirator manufacturer's directions for respirator use. DELAYED EFFECTS FROM LONG TERM OVEREXPOSURE. Abrading or sanding of the dry film may release Crystalline Silica which has been shown to cause lung damage and cancer under long term exposure. Please refer to the SDS for additional information. Keep out of reach of children. Do not transfer contents to other containers for storage.

- 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**

Section 3. Composition/information on ingredients

Ingredient name	% by weight	CAS number
Crystalline Silica, respirable powder	≥25 - ≤50	14808-60-7
n-Butyl Acetate	≥10 - ≤25	123-86-4
Methyl n-Amyl Ketone	≤10	110-43-0
2-methoxy-1-methylethyl acetate	≤5	108-65-6
t-Butyl Acetate	≤3	540-88-5
Heavy Aliphatic Solvent	<1	64742-82-1
Xylene, mixed isomers	≤0.3	1330-20-7
1,2,4-Trimethylbenzene	≤0.3	95-63-6
Light Aromatic Hydrocarbons	≤0.3	64742-95-6

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

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. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : 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. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. If necessary, call a poison center or physician. 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.
- Skin contact** : Causes skin irritation.
- Ingestion** : Can cause central nervous system (CNS) depression.

Over-exposure signs/symptoms

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B65T220	ArmorSeal® Hi-Solids Polyurethane Floor Enamel (Part A) Ultradeep Base	SHW-85-NA-GHS-US	

Section 4. First aid measures

- Eye contact** : Adverse symptoms may include the following:
pain or irritation
watering
redness
- Inhalation** : Adverse symptoms may include the following:
nausea or vomiting
headache
drowsiness/fatigue
dizziness/vertigo
unconsciousness
- Skin contact** : Adverse symptoms may include the following:
irritation
redness
- Ingestion** : No specific data.

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. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

- Suitable extinguishing media** : Use dry chemical, CO₂, water spray (fog) or foam.
- Unsuitable extinguishing media** : Do not use water jet.

Specific hazards arising from the chemical

: Flammable liquid and vapor. 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. The vapor/gas is heavier than air and will spread along the ground. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back.

Hazardous thermal decomposition products

: Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
metal oxide/oxides

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. 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).

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). Avoid exposure - obtain special instructions before use. 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 ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. 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. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.
- 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 in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. 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	CAS #	Exposure limits
Crystalline Silica, respirable powder	14808-60-7	<p>OSHA PEL Z3 (United States, 6/2016). TWA: 250 mppcf / (%SiO₂+5) 8 hours. Form: Respirable</p> <p>TWA: 10 mg/m³ / (%SiO₂+2) 8 hours. Form: Respirable</p> <p>OSHA PEL (United States, 5/2018). TWA: 50 µg/m³ 8 hours. Form: Respirable dust</p> <p>ACGIH TLV (United States, 3/2019). TWA: 0.025 mg/m³ 8 hours. Form: Respirable fraction</p> <p>NIOSH REL (United States, 10/2016). TWA: 0.05 mg/m³ 10 hours. Form: respirable dust</p>
n-Butyl Acetate	123-86-4	<p>NIOSH REL (United States, 10/2016). TWA: 150 ppm 10 hours. TWA: 710 mg/m³ 10 hours. STEL: 200 ppm 15 minutes. STEL: 950 mg/m³ 15 minutes.</p> <p>OSHA PEL (United States, 5/2018). TWA: 150 ppm 8 hours. TWA: 710 mg/m³ 8 hours.</p> <p>ACGIH TLV (United States, 3/2019). STEL: 150 ppm 15 minutes. TWA: 50 ppm 8 hours.</p>
Methyl n-Amyl Ketone	110-43-0	<p>ACGIH TLV (United States, 3/2019). TWA: 50 ppm 8 hours. TWA: 233 mg/m³ 8 hours.</p> <p>NIOSH REL (United States, 10/2016). TWA: 100 ppm 10 hours. TWA: 465 mg/m³ 10 hours.</p> <p>OSHA PEL (United States, 5/2018). TWA: 100 ppm 8 hours. TWA: 465 mg/m³ 8 hours.</p>
2-methoxy-1-methylethyl acetate	108-65-6	<p>AIHA WEEL (United States, 7/2018). TWA: 50 ppm 8 hours.</p>
t-Butyl Acetate	540-88-5	<p>NIOSH REL (United States, 10/2016). TWA: 200 ppm 10 hours. TWA: 950 mg/m³ 10 hours.</p> <p>OSHA PEL (United States, 5/2018). TWA: 200 ppm 8 hours. TWA: 950 mg/m³ 8 hours.</p>

Section 8. Exposure controls/personal protection

Heavy Aliphatic Solvent Xylene, mixed isomers	64742-82-1 1330-20-7	<p>ACGIH TLV (United States, 3/2019). STEL: 150 ppm 15 minutes. TWA: 50 ppm 8 hours.</p> <p>None.</p> <p>ACGIH TLV (United States, 3/2019). TWA: 100 ppm 8 hours. TWA: 434 mg/m³ 8 hours. STEL: 150 ppm 15 minutes. STEL: 651 mg/m³ 15 minutes.</p> <p>OSHA PEL (United States, 5/2018). TWA: 100 ppm 8 hours. TWA: 435 mg/m³ 8 hours.</p>
1,2,4-Trimethylbenzene	95-63-6	<p>ACGIH TLV (United States, 3/2019). TWA: 25 ppm 8 hours. TWA: 123 mg/m³ 8 hours.</p> <p>NIOSH REL (United States, 10/2016). TWA: 25 ppm 10 hours. TWA: 125 mg/m³ 10 hours.</p>
Light Aromatic Hydrocarbons	64742-95-6	None.

Occupational exposure limits (Canada)

Ingredient name	CAS #	Exposure limits
Quartz	14808-60-7	<p>CA British Columbia Provincial (Canada, 5/2019). TWA: 0.025 mg/m³ 8 hours. Form: Respirable</p> <p>CA Quebec Provincial (Canada, 1/2014). TWAEV: 0.1 mg/m³ 8 hours. Form: Respirable dust.</p> <p>CA Ontario Provincial (Canada, 1/2018). TWA: 0.1 mg/m³ 8 hours. Form: Respirable fraction.</p> <p>CA Alberta Provincial (Canada, 6/2018). 8 hrs OEL: 0.025 mg/m³ 8 hours. Form: Respirable particulate</p> <p>CA Saskatchewan Provincial (Canada, 7/2013). TWA: 0.05 mg/m³ 8 hours. Form: respirable fraction</p>
Normal butyl acetate	123-86-4	<p>CA Alberta Provincial (Canada, 6/2018). 15 min OEL: 200 ppm 15 minutes. 15 min OEL: 950 mg/m³ 15 minutes. 8 hrs OEL: 150 ppm 8 hours. 8 hrs OEL: 713 mg/m³ 8 hours.</p> <p>CA British Columbia Provincial (Canada, 5/2019). TWA: 20 ppm 8 hours.</p> <p>CA Ontario Provincial (Canada, 1/2018). TWA: 150 ppm 8 hours. STEL: 200 ppm 15 minutes.</p> <p>CA Quebec Provincial (Canada, 1/2014). TWAEV: 150 ppm 8 hours. TWAEV: 713 mg/m³ 8 hours. STEV: 200 ppm 15 minutes. STEV: 950 mg/m³ 15 minutes.</p> <p>CA Saskatchewan Provincial (Canada,</p>

Section 8. Exposure controls/personal protection

Methyl n-amyl ketone	110-43-0	<p>7/2013). STEL: 200 ppm 15 minutes. TWA: 150 ppm 8 hours. CA Alberta Provincial (Canada, 6/2018). 8 hrs OEL: 233 mg/m³ 8 hours. 8 hrs OEL: 50 ppm 8 hours. CA British Columbia Provincial (Canada, 5/2019). TWA: 50 ppm 8 hours. CA Ontario Provincial (Canada, 1/2018). TWA: 25 ppm 8 hours. TWA: 115 mg/m³ 8 hours. CA Quebec Provincial (Canada, 1/2014). TWAEV: 50 ppm 8 hours. TWAEV: 233 mg/m³ 8 hours. CA Saskatchewan Provincial (Canada, 7/2013). STEL: 60 ppm 15 minutes. TWA: 50 ppm 8 hours.</p>
Tertiary butyl acetate	540-88-5	<p>CA Alberta Provincial (Canada, 6/2018). 8 hrs OEL: 200 ppm 8 hours. 8 hrs OEL: 950 mg/m³ 8 hours. CA British Columbia Provincial (Canada, 5/2019). TWA: 200 ppm 8 hours. CA Ontario Provincial (Canada, 1/2018). TWA: 200 ppm 8 hours. CA Quebec Provincial (Canada, 1/2014). TWAEV: 200 ppm 8 hours. TWAEV: 950 mg/m³ 8 hours. CA Saskatchewan Provincial (Canada, 7/2013). STEL: 250 ppm 15 minutes. TWA: 200 ppm 8 hours.</p>
Xylene	1330-20-7	<p>CA Alberta Provincial (Canada, 6/2018). 8 hrs OEL: 100 ppm 8 hours. 15 min OEL: 651 mg/m³ 15 minutes. 15 min OEL: 150 ppm 15 minutes. 8 hrs OEL: 434 mg/m³ 8 hours. CA British Columbia Provincial (Canada, 5/2019). TWA: 100 ppm 8 hours. STEL: 150 ppm 15 minutes. CA Quebec Provincial (Canada, 1/2014). TWAEV: 100 ppm 8 hours. TWAEV: 434 mg/m³ 8 hours. STEV: 150 ppm 15 minutes. STEV: 651 mg/m³ 15 minutes. CA Ontario Provincial (Canada, 1/2018). STEL: 150 ppm 15 minutes. TWA: 100 ppm 8 hours. CA Saskatchewan Provincial (Canada, 7/2013). STEL: 150 ppm 15 minutes. TWA: 100 ppm 8 hours.</p>

[Occupational exposure limits \(Mexico\)](#)

Section 8. Exposure controls/personal protection

	CAS #	Exposure limits
Crystalline Silica, respirable powder	14808-60-7	NOM-010-STPS-2014 (Mexico, 4/2016). TWA: 0.025 mg/m ³ 8 hours. Form: Respirable fraction
n-Butyl Acetate	123-86-4	NOM-010-STPS-2014 (Mexico, 4/2016). TWA: 150 ppm 8 hours. STEL: 200 ppm 15 minutes.
Methyl n-Amyl Ketone	110-43-0	NOM-010-STPS-2014 (Mexico, 4/2016). TWA: 50 ppm 8 hours.
t-Butyl Acetate	540-88-5	NOM-010-STPS-2014 (Mexico, 4/2016). TWA: 200 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

Hand protection : 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.

Body protection : 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.

Other skin protection : 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.

Respiratory protection : 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

Physical state	: Liquid.
Color	: Not available.
Odor	: Not available.
Odor threshold	: Not available.
pH	: Not available.
Melting point/freezing point	: Not available.
Boiling point/boiling range	: 97°C (206.6°F)
Flash point	: Closed cup: 39°C (102.2°F) [Pensky-Martens Closed Cup]
Evaporation rate	: 2.5 (butyl acetate = 1)
Flammability (solid, gas)	: Not available.
Lower and upper explosive (flammable) limits	: Lower: 1.1% Upper: 13.1%
Vapor pressure	: 4.5 kPa (34 mm Hg) [at 20°C]
Vapor density	: 3.94 [Air = 1]
Relative density	: 1.23
Solubility	: Not available.
Partition coefficient: n-octanol/water	: Not available.
Auto-ignition temperature	: Not available.
Decomposition temperature	: Not available.
Viscosity	: Kinematic (40°C (104°F)): >0.205 cm ² /s (>20.5 cSt)
Molecular weight	: Not applicable.
Aerosol product	
Heat of combustion	: 8.418 kJ/g

Section 10. Stability and reactivity

Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	: The product is stable.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Do not allow vapor to accumulate in low or confined areas.
Incompatible materials	: Reactive or incompatible with the following materials: oxidizing materials
Hazardous decomposition products	: 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
n-Butyl Acetate	LD50 Dermal	Rabbit	>17600 mg/kg	-
	LD50 Oral	Rat	10768 mg/kg	-
Methyl n-Amyl Ketone	LD50 Oral	Rat	1600 mg/kg	-
2-methoxy-1-methylethyl acetate	LD50 Dermal	Rabbit	>5 g/kg	-
	LD50 Oral	Rat	8532 mg/kg	-
t-Butyl Acetate	LD50 Oral	Rat	4100 mg/kg	-
Xylene, mixed isomers	LC50 Inhalation Gas.	Rat	5000 ppm	4 hours
	LD50 Oral	Rat	4300 mg/kg	-
1,2,4-Trimethylbenzene	LC50 Inhalation Vapor	Rat	18000 mg/m ³	4 hours
	LD50 Oral	Rat	5 g/kg	-
Light Aromatic Hydrocarbons	LD50 Oral	Rat	8400 mg/kg	-

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
n-Butyl Acetate	Eyes - Moderate irritant	Rabbit	-	100 mg	-
	Skin - Moderate irritant	Rabbit	-	24 hours 500 mg	-
Methyl n-Amyl Ketone	Skin - Mild irritant	Rabbit	-	24 hours 14 mg	-
t-Butyl Acetate	Eyes - Mild irritant	Rabbit	-	100 UI	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 UI	-
Xylene, mixed isomers	Eyes - Mild irritant	Rabbit	-	87 mg	-
	Eyes - Severe irritant	Rabbit	-	24 hours 5 mg	-
	Skin - Mild irritant	Rat	-	8 hours 60 UI	-
	Skin - Moderate irritant	Rabbit	-	24 hours 500 mg	-
Light Aromatic Hydrocarbons	Skin - Moderate irritant	Rabbit	-	100 %	-
	Eyes - Mild irritant	Rabbit	-	24 hours 100 UI	-

Sensitization

Not available.

Mutagenicity

Not available.

Carcinogenicity

Not available.

Classification

Product/ingredient name	OSHA	IARC	NTP
Crystalline Silica, respirable powder	-	1	Known to be a human carcinogen.
Xylene, mixed isomers	-	3	-

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Section 11. Toxicological information

Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
n-Butyl Acetate	Category 3	Not applicable.	Narcotic effects
Methyl n-Amyl Ketone	Category 3	Not applicable.	Narcotic effects
	Category 3	Not applicable.	Respiratory tract irritation
2-methoxy-1-methylethyl acetate	Category 3	Not applicable.	Narcotic effects
t-Butyl Acetate	Category 3	Not applicable.	Narcotic effects
	Category 3	Not applicable.	Respiratory tract irritation
Heavy Aliphatic Solvent	Category 3	Not applicable.	Narcotic effects
	Category 3	Not applicable.	Respiratory tract irritation
Xylene, mixed isomers	Category 3	Not applicable.	Respiratory tract irritation
1,2,4-Trimethylbenzene	Category 3	Not applicable.	Respiratory tract irritation
Light Aromatic Hydrocarbons	Category 3	Not applicable.	Narcotic effects
	Category 3	Not applicable.	Respiratory tract irritation

Specific target organ toxicity (repeated exposure)

Name	Category	Route of exposure	Target organs
Crystalline Silica, respirable powder	Category 1	Inhalation	Not determined
Methyl n-Amyl Ketone	Category 2	Not determined	Not determined
Heavy Aliphatic Solvent	Category 1	Not determined	central nervous system (CNS)
Xylene, mixed isomers	Category 2	Not determined	Not determined
Light Aromatic Hydrocarbons	Category 2	Not determined	Not determined

Aspiration hazard

Name	Result
Heavy Aliphatic Solvent	ASPIRATION HAZARD - Category 1
Xylene, mixed isomers	ASPIRATION HAZARD - Category 1
1,2,4-Trimethylbenzene	ASPIRATION HAZARD - Category 1
Light Aromatic Hydrocarbons	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.

Skin contact : Causes skin irritation.

Ingestion : Can cause central nervous system (CNS) depression.

Symptoms related to the physical, chemical and toxicological characteristics

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

Section 11. Toxicological information

- Inhalation** : Adverse symptoms may include the following:
 nausea or vomiting
 headache
 drowsiness/fatigue
 dizziness/vertigo
 unconsciousness
- Skin contact** : Adverse symptoms may include the following:
 irritation
 redness
- Ingestion** : No specific data.

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** : Causes damage to organs through prolonged or repeated exposure.
- Carcinogenicity** : May cause cancer. Risk of cancer depends on duration and level of exposure.
- 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** : No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Route	ATE value
Oral	19583.65 mg/kg
Inhalation (vapors)	114.39 mg/l

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
n-Butyl Acetate	Acute LC50 32 mg/l Marine water	Crustaceans - Artemia salina	48 hours
	Acute LC50 18000 µg/l Fresh water	Fish - Pimephales promelas	96 hours
Methyl n-Amyl Ketone	Acute LC50 131000 µg/l Fresh water	Fish - Pimephales promelas	96 hours
t-Butyl Acetate	Acute LC50 327000 µg/l Fresh water	Fish - Pimephales promelas	96 hours
Xylene, mixed isomers	Acute LC50 8500 µg/l Marine water	Crustaceans - Palaemonetes pugio	48 hours
	Acute LC50 13400 µg/l Fresh water	Fish - Pimephales promelas	96 hours
1,2,4-Trimethylbenzene	Acute LC50 4910 µg/l Marine water	Crustaceans - Elasmopus pecteniscus - Adult	48 hours

Section 12. Ecological information

Acute LC50 7720 µg/l Fresh water	Fish - Pimephales promelas	96 hours
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Persistence and degradability

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
n-Butyl Acetate	-	-	Readily
Methyl n-Amyl Ketone	-	-	Readily
Xylene, mixed isomers	-	-	Readily
Light Aromatic Hydrocarbons	-	-	Readily

Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
Heavy Aliphatic Solvent	-	10 to 2500	high
Xylene, mixed isomers	-	8.1 to 25.9	low
1,2,4-Trimethylbenzene	-	243	low
Light Aromatic Hydrocarbons	-	10 to 2500	high

Mobility in soil






Soil/water partition coefficient (K_{oc}) : 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. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	DOT Classification	TDG Classification	Mexico Classification	IATA	IMDG
UN number	UN1263	UN1263	UN1263	UN1263	UN1263
UN proper shipping name	PAINT	PAINT	PAINT	PAINT	PAINT
Transport hazard class(es)	3 	3 	3 	3 	3 

Section 14. Transport information

Packing group	III	III	III	III	III
Environmental hazards	No.	No.	No.	No.	No.
Additional information	This product may be re-classified as "Combustible Liquid," unless transported by vessel or aircraft. Non-bulk packages (less than or equal to 119 gal) of combustible liquids are not regulated as hazardous materials in package sizes less than the product reportable quantity. <u>ERG No.</u> 128	Product classified as per the following sections of the Transportation of Dangerous Goods Regulations: 2.18-2.19 (Class 3). <u>ERG No.</u> 128	-	-	<u>Emergency schedules</u> F-E, S-E

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.

International regulations

Section 15. Regulatory information

International lists : **Australia inventory (AICS)**: Not determined.
China inventory (IECSC): Not determined.
Japan inventory (ENCS): Not determined.
Japan inventory (ISHL): Not determined.
Korea inventory (KECI): Not determined.
New Zealand Inventory of Chemicals (NZIoC): Not determined.
Philippines inventory (PICCS): Not determined.
Taiwan Chemical Substances Inventory (TCSI): Not determined.
Thailand inventory: Not determined.
Turkey inventory: Not determined.
Vietnam inventory: Not determined.

Section 16. Other information

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

Health *	3
Flammability	2
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.

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 LIQUIDS - Category 3	On basis of test data
SKIN CORROSION/IRRITATION - Category 2	Calculation method
SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A	Calculation method
CARCINOGENICITY - Category 1A	Calculation method
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3	Calculation method
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1	Calculation method

History

Date of printing : 5/14/2020

Date of issue/Date of revision : 5/14/2020

Date of previous issue : 3/2/2020

Version : 15.01

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)
N/A = Not available
SGG = Segregation Group

Section 16. Other information

UN = United Nations

✔ Indicates information that has changed from previously issued version.

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 the manufacturer, including but not limited to the incorporation of products not specified by the manufacturer, or the use or addition of products in proportions not specified by the manufacturer. 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.

SAFETY DATA SHEET

B90A101

Section 1. Identification

Product name : ARMORSEAL® TREAD-PLEX Water Based Acrylic Floor Coating
Haze Gray

Product code : B90A101

Other means of identification : Not available.

Product type : Liquid.

Relevant identified uses of the substance or mixture and uses advised against
Not applicable.

Manufacturer : THE SHERWIN-WILLIAMS COMPANY
101 PROSPECT AVENUE, NW
CLEVELAND, OHIO 44115

Emergency telephone number of the company : (216) 566-2917

Product Information Telephone Number : (800) 524-5979

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 : SKIN CORROSION/IRRITATION - Category 2
SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A
CARCINOGENICITY - Category 2
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2
Percentage of the mixture consisting of ingredient(s) of unknown toxicity: 16.4%

GHS label elements

Hazard pictograms :



Signal word : Warning

Hazard statements : Causes serious eye irritation.
Causes skin irritation.
Suspected of causing cancer.
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. Use personal protective equipment as required. Wear protective gloves. Wear eye or face protection. Do not breathe vapor. Wash hands thoroughly after handling.

Section 2. Hazards identification

Response	: Get medical attention if you feel unwell. IF exposed or concerned: Get medical attention. IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing. Wash contaminated clothing 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.
Disposal	Dispose of contents and container in accordance with all local, regional, national and international regulations.
Supplemental label elements	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. Do not transfer contents to other containers for storage.
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
Calcium Carbonate	17.2	471-34-1
Titanium Dioxide	13.7	13463-67-7
2-Methoxymethylethoxypropanol	2.7	34590-94-8
Carbon Black	0.2	1333-86-4

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 or the environment 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 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 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	: 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. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position

Section 4. First aid measures

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** : No known significant effects or critical hazards.
- Skin contact** : Causes skin irritation.
- Ingestion** : Irritating to mouth, throat and stomach.

Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following:
 - pain or irritation
 - watering
 - redness
- Inhalation** : No specific data.
- Skin contact** : Adverse symptoms may include the following:
 - irritation
 - redness
- Ingestion** : No specific data.

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. 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 : In a fire or if heated, a pressure increase will occur and the container may burst.

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

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.

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. Do not touch or walk through spilled material. 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 specialised 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).

Methods and materials for containment and cleaning up

- Small spill** : Stop leak if without risk. Move containers from spill area. 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. 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). Avoid exposure - obtain special instructions before use. 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 ingest. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
- 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.
- Conditions for safe storage, including any incompatibilities** : Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
Calcium Carbonate	OSHA PEL (United States, 2/2013). TWA: 5 mg/m ³ 8 hours. Form: Respirable fraction
Titanium Dioxide	TWA: 15 mg/m ³ 8 hours. Form: Total dust ACGIH TLV (United States, 4/2014). TWA: 10 mg/m ³ 8 hours.
2-Methoxymethylethoxypropanol	OSHA PEL (United States, 2/2013). TWA: 15 mg/m ³ 8 hours. Form: Total dust ACGIH TLV (United States, 4/2014). Absorbed through skin. TWA: 100 ppm 8 hours. TWA: 606 mg/m ³ 8 hours. STEL: 150 ppm 15 minutes. STEL: 909 mg/m ³ 15 minutes. NIOSH REL (United States, 10/2013). Absorbed through skin. TWA: 100 ppm 10 hours. TWA: 600 mg/m ³ 10 hours. STEL: 150 ppm 15 minutes. STEL: 900 mg/m ³ 15 minutes.
Carbon Black	OSHA PEL (United States, 2/2013). Absorbed through skin. TWA: 100 ppm 8 hours. TWA: 600 mg/m ³ 8 hours. NIOSH REL (United States, 10/2013). TWA: 3.5 mg/m ³ 10 hours. TWA: 0.1 mg of PAHs/cm ³ 10 hours. OSHA PEL (United States, 2/2013). TWA: 3.5 mg/m ³ 8 hours. ACGIH TLV (United States, 4/2014). TWA: 3 mg/m ³ 8 hours. Form: Inhalable fraction

Appropriate engineering controls : If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

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

- Hand protection** : 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.
- Body protection** : 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.
- Other skin protection** : 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.
- Respiratory protection** : Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Section 9. Physical and chemical properties

Appearance

- Physical state** : Liquid.
- Color** : Not available.
- Odor** : Not available.
- Odor threshold** : Not available.
- pH** : 9.2
- Melting point** : Not available.
- Boiling point** : 100°C (212°F)
- Flash point** : Closed cup: >93.3°C (>199.9°F)
- Evaporation rate** : 0.8 (butyl acetate = 1)
- Flammability (solid, gas)** : Not available.
- Lower and upper explosive (flammable) limits** : Lower: 1.1%
Upper: 14%
- Vapor pressure** : 0.31 kPa (2.333 mm Hg) [at 20°C]
- Vapor density** : 1 [Air = 1]
- Relative density** : 1.32
- Solubility** : Not available.
- Partition coefficient: n-octanol/water** : Not available.
- Auto-ignition temperature** : Not available.
- Decomposition temperature** : Not available.
- Viscosity** : Kinematic (room temperature): >0.205 cm²/s (>20.5 cSt)
Kinematic (40°C (104°F)): >0.205 cm²/s (>20.5 cSt)
- Aerosol product**
- Heat of combustion** : 0.000001321 kJ/g

Section 10. Stability and reactivity

- Reactivity** : No specific test data related to reactivity available for this product or its ingredients.
- Chemical stability** : The product is stable.
- Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.
- Conditions to avoid** : No specific data.
- Incompatible materials** : No specific data.
- Hazardous decomposition products** : 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
Calcium Carbonate	LD50 Oral	Rat	6450 mg/kg	-
Carbon Black	LD50 Oral	Rat	>15400 mg/kg	-

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Calcium Carbonate	Eyes - Severe irritant	Rabbit	-	24 hours 750 Micrograms	-
	Skin - Moderate irritant	Rabbit	-	24 hours 500 milligrams	-
Titanium Dioxide	Skin - Mild irritant	Human	-	72 hours 300 Micrograms Intermittent	-
2-Methoxymethylethoxypropanol	Eyes - Mild irritant	Human	-	8 milligrams	-
	Eyes - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
	Skin - Mild irritant	Rabbit	-	500 milligrams	-

Sensitization

Not available.

Mutagenicity

Not available.

Carcinogenicity

Not available.

Classification

Product/ingredient name	OSHA	IARC	NTP
Titanium Dioxide	-	2B	-
Carbon Black	-	2B	-

Reproductive toxicity

Not available.

Teratogenicity

Section 11. Toxicological information

Not available.

Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
2-Methoxymethylethoxypropanol	Category 3	Not applicable.	Respiratory tract irritation and Narcotic effects

Specific target organ toxicity (repeated exposure)

Name	Category	Route of exposure	Target organs
2-Methoxymethylethoxypropanol	Category 2	Not determined	Not determined

Aspiration hazard

Not available.

Information on the likely routes of exposure : Not available.

Potential acute health effects

Eye contact : Causes serious eye irritation.
Inhalation : No known significant effects or critical hazards.
Skin contact : Causes skin irritation.
Ingestion : Irritating to mouth, throat and stomach.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : Adverse symptoms may include the following:
pain or irritation
watering
redness
Inhalation : No specific data.
Skin contact : Adverse symptoms may include the following:
irritation
redness
Ingestion : No specific data.

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 : Suspected of causing cancer. Risk of cancer depends on duration and level of exposure.

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 : No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Not available.

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
Calcium Carbonate	Acute LC50 >56000 ppm Fresh water Chronic NOEC 61 mg/g Fresh water	Fish - Gambusia affinis - Adult Fish - Oncorhynchus mykiss - Juvenile (Fledgling, Hatchling, Weanling)	96 hours 28 days
Titanium Dioxide	Acute LC50 >1000000 µg/l Marine water	Fish - Fundulus heteroclitus	96 hours

Persistence and degradability

Not available.

Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
Titanium Dioxide	-	352	low

Mobility in soil

Soil/water partition coefficient (K_{oc}) : 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. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	DOT Classification	TDG Classification	Mexico Classification	IATA	IMDG
UN number	Not regulated.	Not regulated.	Not regulated.	Not regulated.	Not regulated.
UN proper shipping name	-	-	-	-	-
Transport hazard class(es)	-	-	-	-	-
Packing group	-	-	-	-	-
Environmental hazards	No.	No.	No.	No.	No.
Additional information	<u>Special provisions</u> Not Applicable	<u>Special provisions</u> Not Applicable	<u>Special provisions</u> Not Applicable	<u>Special provisions</u> Not Applicable	<u>Emergency schedules (EmS)</u> Not Applicable

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 73/78 and the IBC Code : Not available.

Section 15. Regulatory information

U.S. Federal regulations :

State regulations

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	*	1
Flammability		0
Physical hazards		0

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 are not required on SDSs 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 mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

The customer is responsible for determining the PPE code for this material.

Section 16. Other information

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. 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.

MATERIAL SAFETY DATA SHEET

8/18/2012

MANUFACTURER OR DISTRIBUTOR: Rich Art Color Co.
202 Pegasus Avenue
P.O. Box 198
Northvale, New Jersey 07647

INFORMATION TELEPHONE NUMBER: 201-767-0009
EMERGENCY TELEPHONE NUMBER: 201-264-7542cel

SECTION I - PRODUCT IDENTIFICATION

PRODUCT NAME: RICH ART CLEAN COLORS WASHABLE PAINT
PRODUCT SIZES: 473, 946, 3785 ML (SEE COMMENTS)
PRODUCT CLASS: TEMPERA (LIQUID)

PRODUCT NUMBER: CLNC
BRAND NAME: RICH ART CLEAN COLORS WASHABLE PAINT
ART MINDS TEMPERA PAINT
MICHAELS SKU 091776

SECTION II - HAZARDOUS INGREDIENTS

<u>Ingredient</u>	<u>CAS #</u>	<u>PEL/TLV (MG/M³)</u>	<u>Max % Weight</u>	<u>NTP</u>	<u>IARC</u>
None					

SECTION III - PHYSICAL AND CHEMICAL CHARACTERISTICS

BOILING POINT: N/A
VAPOR PRESSURE: N/A
SPECIFIC VAPOR DENSITY (AIR=1): N/A
SOLUBILITY IN WATER: N/A
APPEARANCE AND ODOR:

MELTING POINT: N/A
SPECIFIC GRAVITY: N/A
REACTIVITY IN WATER: NON-REACTIVE

SECTION IV - FIRE AND EXPLOSION INFORMATION

FLASH POINT (METHOD): N/A
EXPLOSION LIMITS IN AIR (% BY VOLUME): NOT EXPLOSIVE
EXTINGUISHING MEDIA: NO SPECIAL MEDIA REQUIRED
FIRE FIGHTING PROCEDURES: NO SPECIAL FIRE FIGHTING PROCEDURES REQUIRED
UNUSUAL FIRE & EXPLOSION HAZARDS: NOT COMBUSTIBLE

AUTOIGNITION TEMPERATURE: N/A

SECTION V - PHYSICAL HAZARDS/REACTIVITY

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

SECTION VI - HEALTH HAZARD DATA

PERMISSIBLE EXPOSURE LEVEL: SEE SECTION II FOR COMPONENT PEL/TLVs
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: NOOSHA: NO

SEE SECTION II FOR COMPONENTS AFFECTED

MEDICAL CONDITIONS USUALLY AGGRAVATED BY OVER EXPOSURE TO THIS PRODUCT: NONE

FIRST AID MEASURES: NONE REQUIRED. NO ACUTE HEALTH EFFECTS EXPECTED.

SECTION VII - SPILL OR LEAK PROCEDURES

PRECAUTIONS TO BE TAKEN DURING STORAGE AND HANDLING: NO SPECIAL PRECAUTIONS REQUIRED.

STEPS TO BE TAKEN IN CASE A MATERIAL IS SPILLED: NO SPECIAL SPILL PROCEDURES REQUIRED.

WASTE DISPOSAL METHOD: DISPOSE IN ACCORDANCE WITH FEDERAL, STATE AND LOCAL REGULATIONS.

SECTION VIII - PROTECTIVE EQUIPMENT/CONTROL MEASURES:

RESPIRATORY PROTECTION AND SPECIAL VENTILATION REQUIREMENTS: NONE REQUIRED

OTHER PROTECTIVE EQUIPMENT (GLOVES, GOGGLES, ETC): NONE REQUIRED

WORK/HYGIENE PRACTICES: NONE REQUIRED

SECTION IX - ADDITIONAL INFORMATION AND WARNINGS

THIS INFORMATION SHEET IS FOR CONSUMER USE ONLY.
ADDITIONAL INFORMATION AND WARNINGS: NONE REQUIRED

SECTION X - COLOR INFORMATION

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

<u>Product Color</u>	<u>Hazardous Ingredient</u>
C92 RED (RED ROVER RED)	(none)

Larry Cook, Ph.D., DABT

8/18/2012



SAFETY DATA SHEET

ART-TIME WASHABLE TEMPERA
Issue date: 10/08/2012

SDS ID: 00081012
Revision Date: ---

*** Section 1 – PRODUCT COMPANY IDENTIFICATION ***

Product Name: ART-TIME WASHABLE TEMPERA,
ART-TIME WASHABLE GLITTER TEMPERA,
ART-TIME WASHABLE FLUORESCENT TEMPERA

SARGENT ART, INC

Phone: 1-800-424-3596

100 East Diamond Ave.
Hazleton, PA 18201
www.sargentart.com

Health Emergency – Call local Poison Control Center

Synonyms: 650 Series; 8oz Art-Time Washable Tempera; 16oz Art-Time Washable Tempera; 32oz Art-Time Washable Tempera; 128oz. Art-Time Washable Tempera; 6ct. Washable Primary Set; 12ct. Washable Set (primary & secondary); 630 Series; 8oz Art-Time Washable Glitter Tempera Clear Bottle; 16oz Art-Time Washable Glitter Tempera Clear Bottle Pint; 6ct. Washable Glitter Set; 390 Series; 16oz Art-Time Washable Fluorescent Tempera Pint; 6ct. Washable Fluorescent Set;

Product Codes: 66-5417

Product Use: Arts and Crafts

*** Section 2 – HAZARD(S) IDENTIFICATION ***

EMERGENCY OVERVIEW

Color: various colors
Physical Form: liquid

POTENTIAL HEALTH EFFECTS

Inhalation: none
Skin Contact: none
Eye Contact: none
Ingestion: none

*** Section 3 – COMPOSITION / INFORMATION ON INGREDIENTS ***

CAS	Component	Percent	Symbol	Risk Phrase(s)
Not Available	Product has been certified as non-toxic by the US Board Certifies Toxicologist and Conforms to ASTM D-4236 standard practice for Labeling Art Materials for acute and chronic adverse health hazards.	100	---	---

*** Section 4 – FIRST AID MEASURES ***



SAFETY DATA SHEET

ART-TIME WASHABLE TEMPERA

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Inhalation

It is unlikely that emergency treatment will be required. Remove from exposure. Get medical attention, if needed.

Skin

It is unlikely that emergency treatment will be required. If adverse effects occur, wash with soap or mild detergent and large amounts of water. Get medical attention, if needed.

Eyes

It is unlikely that emergency treatment will be required. Wash with large amounts of water or normal saline until no evidence of chemical remains (at least 15-20 minutes). Get medical attention immediately.

Ingestion

Rinse mouth thoroughly with water. Get medical attention if any discomfort occurs.

*** Section 5 – FIRE FIGHTING MEASURES ***

See Section 9 for Flammability Properties

NFPA Ratings: Health: 1 Fire: 1 Reactivity: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

Flammable Properties

Slight fire hazard.

Extinguishing Media

Regular dry chemical, carbon dioxide, water, regular foam

Fire Fighting Measures

Move container from fire area if it can be done without risk. Avoid inhalation of material or combustion by-products.

*** Section 6 – ACCIDENTAL RELEASE MEASURES ***

Occupational spill/release

Absorb with sand or other non-combustible material. Collect spilled material in appropriate container for disposal.

*** Section 7 – HANDLING AND STORAGE ***

Handling Procedures

Provide adequate ventilation. Wear appropriate protection equipment. Avoid breathing mist or vapor. Avoid contact with eyes and prolonged skin contact. Do not taste or swallow. Keep the workplace clean. Observe good industrial hygiene practices.

Storage Procedures

Store in a well-ventilated place. Store in closed original container at room temperature.

*** Section 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION ***

Component Exposure Limits

ACGIH and EU have not developed exposure limits for any of this product's components.

Ventilation

Based on available information, additional ventilation is not required.

PERSONAL PROTECTIVE EQUIPMENT

Eyes/Face



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Eye protection not required under normal conditions.

Protective Clothing

Protective clothing is not required under normal conditions.

Glove Recommendations

Protective gloves are not required under normal conditions.

Respiratory Protection

No respirator is required under normal conditions of use.

Under conditions of frequent use or heavy exposure, respiratory protection may be needed.

*** Section 9 – PHYSICAL AND CHEMICAL PROPERTIES ***

Appearance:	Liquid	Flash Point:	Not available
Physical State:	Liquid	Flammability:	Not available
Physical Form:	Liquid	Vapor Pressure:	Not available
Color:	Assorted colors	Vapor Density (air=1):	Not available
Odor:	Odorless	Evaporation Rate:	Not available
Odor Threshold:	Not available	Specific Gravity:	1.13 – 1.18
pH:	<=9.5	Density:	9.2 – 9.85 Lbs/Gal
Melting Point:	Not available	Water Solubility:	Soluble
Freezing Point:	Not available	Coeff. Water/Oil Dist:	Not available
Boiling Point:	Not available	Volatility:	Not available
Viscosity:	12000 – 45000 cP		

*** Section 10 – STABILITY AND REACTIVITY ***

Chemical Stability

Stable at normal temperatures and pressure.

Conditions to Avoid

None reported.

Materials to Avoid

Oxidizing materials.

Decomposition Products

Oxides of carbon.

Possibility of Hazardous Reactions

Will not polymerize.

*** Section 11 – TOXICOLOGICAL INFORMATION ***

Component Analysis – LD50/LC50

The components of this material have been reviewed in various sources and no selected endpoints have been identified.

RTECS Acute Toxicity (selected)

The components of this material have been reviewed and RTECS publishes no data as of the date on this document.

Component Carcinogenicity

None of this product's components are listed by ACGIH, IARC, or DFG.

RTECS Irritation



SAFETY DATA SHEET

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The components of this material have been reviewed and RTECS publishes no data as of the date on this document.

*** Section 12 – ECOLOGICAL INFORMATION ***

Component Analysis – Aquatic Toxicity

No LOLI ecotoxicity data is available for this product's components.

*** Section 13 – DISPOSAL CONSIDERATION ***

Disposal Methods

Dispose in accordance with all applicable regulations.

Component Waste Numbers

The U.S. EPA has not published waste numbers for this product's components.

*** Section 14 – TRANSPORT INFORMATION ***

US DOT Information:	Not Regulated.
TDG Information:	Not Regulated.
ADR Information:	Not Regulated.
RID Information:	Not Regulated.
IATA Information:	Not Regulated.
ICAO Information:	Not Regulated.
IMDG Information:	Not Regulated.

*** Section 15 – REGULATORY INFORMATION ***

U.S. Federal Regulations

None of this products components are listed under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 311/312 (40 CFR 370.21), SARA Section 313 (40 CFR 372.65), CERCLA (40 CFR 302.4), TSCA 12(b), or require an OSHA process safety plan.

SARA Section 311/312 (40 CFR 370 Subparts B and C)

Acute Health: No Chronic Health: No Fire: No Pressure: No Reactive: No

U.S. State Regulations

None of this product's components are listed on the state lists from CA, MA, MN, NJ or PA.

Not regulated under California Proposition 65

Canada

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

WHMIS CLASSIFICATION: Not a Controlled Product under Canada's Workplace Hazardous Material Information System.

Component Analysis – Inventory

No information is available.



SAFETY DATA SHEET

ART-TIME WASHABLE TEMPERA

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*** Section 16 – OTHER INFORMATION ***

Key / Legend

ACGIH - American Conference of Governmental Industrial Hygienists; ADR – European Road Transport; AU – Australia; BOD – Biochemical Oxygen Demand; C – Celsius; CA – Canada; CAS – Chemical Abstracts Service; CERCLA – Comprehensive Environmental Response, Compensation, and Liability Act; CN – China; CPR – Controlled Products Regulations; DFG – Deutsche Forschungsgemeinschaft; DOT – Department of Transportation; DSL – Domestic Substances List; EEC – European Economic Community; EINECS – European Inventory of Existing Commercial Chemical Substances; EPA – Environmental Protection Agency; EU – European Union; F – Fahrenheit; IARC – International Agency for Research on Cancer; IATA – International Air Transport Association; ICAO – International Civil Agency Organization; IDL – Ingredient Disclosure List; IDLH – Immediately Dangerous to Life and Health; IMDG – International Maritime Dangerous Goods; JP – Japan; Kow – Octanol/water partition coefficient; KR – Korea; LEL – Lower Explosive Limit; LOLI – List Of Lists – ChemADVIUSOR's Regulatory Database; MAK – Maximum Concentration Value in the Workplace; MEL – Maximum Exposure Limits; NFPA – National Fire Protection Agency; NIOSH – National Institute for Occupational Safety and Health; NJTSR – New Jersey Trade Secret Registry; NTP – National Toxicology Program; NZ – New Zealand; OSHA – Occupational Safety and Health Administration; PH – Philippines; RCRA – Resource Conservation and Recovery Act; RID – European Rail Transport; RTECS – Registry of Toxic Effects of Chemical Substances; SARA – Superfund Amendments and Reauthorization Act; STEL – Short-term Exposure Limit; TDG – Transportation of Dangerous Goods; TSCA – Toxic Substances Control Act; TWA – Time Weighted Average; UEL – Upper Explosive Limit; US – United States.

Disclaimer

This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment.



SAFETY DATA SHEET

ART-TIME WASHABLE TEMPERA
Issue date: 10/08/2012

SDS ID: 00081012
Revision Date: ---

MATERIAL SAFETY DATA SHEET

Product: Artist Choice Glazes

Product Code: A Series - AP

Manufacturer's Name: American Art Clay Co. Inc.
6060 Guion Road
Indianapolis, IN 46254

Information Number: (800) 374-1600

Emergency Number: (800) 374-1600

Section I – Product Identification

Product Name: Artist Choice Glazes Product Class: Ceramic Glaze Product Size: 16 oz.

A 24 Exotic Blue, A 28 Peacock, A 62 Camel, A 34 Sand Bar, A 43 Green Float, A 52 Old Brick, A 61 Moss Brown, A 62 Camel & A 66 Burnt Orange

Section II – Hazardous Ingredients

Reportable Components	CAS#	Vapor Pressure Mm Hg @ Temp	Weight Percent
Water	7732-18-5		
Clay	1332-58-7		
Sodium Borosilicate Frit	65997-18-4		
Inorganic Stains	Mixture		
Gum	9004-32-4		

No reportable quantities of hazardous ingredients are present.

No hazardous ingredients. This product carries the "AP" Seal. Labeling conforms to ASTM D4236.

Section III - Physical / Chemical Characteristics

Boiling Range: NA	Specific Gravity (H2O=1): Less than 2
Vapor Density: Heavier than air	Evaporation Rate: NA
Coating V.O. C.: NA	Material V.O.C.: NA
Appearance and Odor: Liquid	

Section IV – Fire and Explosion Hazards Data

Flash Point: NA	Method Used: NA
Flammable Limits in Air by Volume: NA – Lower	NA – Upper
Extinguishing Media: NA	
Special Firefighting Procedures: No fire hazard.	
Unusual Fire and Explosion Hazards: No fire hazard.	

Section V – Reactivity Data

Stability: Stable	Conditions to Avoid: None
Incompatibility (Materials to Avoid): None	
Hazardous Decomposition or Byproducts: Will not occur.	
Hazardous Polymerization: Will not occur.	

Section VI – Health Hazards Data

Inhalation Health Risks and Symptoms of Exposure: None.

Skin and Eye Contact Health Risks and Symptoms of Exposure: Eyes – rinse eyes thoroughly for 15 minutes with tap water. Contact physician if irritation persists. Skin – wash hands with soap and water after use.

Skin Absorption Health Risks and Symptoms of Exposure: None.

Ingestion Health Risks and Symptoms of Exposure: No hazardous ingredients.

Health Hazards (Acute / Chronic): No hazardous ingredients.

Carcinogenicity: n – NTP Carcinogen N – IARC Monographs N – OSHA Regulated

Medical Conditions Generally Aggravated by Exposure: Unknown

Emergency and First Aid Procedures: Contact your local poison control for further health information.

Section VII – Precautions for Safe Handling and Use

Steps to be taken in case material is released or spilled: Specific steps not necessary.

Waste Disposal Method: Dispose of paper towels in trash and rinse sponges. In manufacturing, dispose of in accordance to Local, State or Federal regulations.

Precautions to be taken in handling and storing: Always keep lid on container when not being used.

Other Precautions: None.

Section VIII – Control Measures

Respiratory Protection: Not necessary

Ventilation: Not necessary

Protective gloves: Not needed.

Eye Protection: Not needed.

Other Protective Clothing or Equipment: Not needed.

Work / Hygienic Practices: Refer to the AMACO Product Encyclopedia and Safety Manual.

Section IX – Disclaimer

Information presented herein has been compiled from sources considered to be dependable and is accurate and reliable to the best of our knowledge and belief but is not guaranteed to be so. Since conditions of use are beyond our control we make no warranties, expressed or implied, except for those that may be contained in our written acknowledgement.

Prepared by: L. Jenkins
1/2011

MATERIAL SAFETY DATA SHEET

ARTIST'S LOFT ACRYLIC PAINT

1. Product and Company Identification

Revision date 07-08-2011
Version # 01
CAS # Mixture
Product code SKU 125734, UPC 400100660454
Product use Paint.
Manufacturer/Supplier Artmate Co, Ltd
50 Zhonghua Road
Nanjing, China
lvjihong@jabp.com
Telephone Number: 86-25-52852684
Contact Person: Ella LU
Emergency Emergency Telephone Number: 86-25-52852743

2. Hazards Identification

Physical state Liquid.
Appearance Paste.
Emergency overview Not regarded as a health or environmental hazard under current legislation.
OSHA regulatory status This product is not hazardous according to OSHA 29CFR 1910.1200.
Potential health effects
Routes of exposure Skin contact. Eye contact. Ingestion. Inhalation.
Eyes Direct contact with eyes may cause temporary irritation.
Skin Prolonged skin contact may cause temporary irritation.
Inhalation Under normal conditions of intended use, this material is not expected to be an inhalation hazard.
Ingestion Ingestion may cause irritation and malaise.
Chronic effects Inhalation of carbon black or titanium dioxide dust may cause cancer, however due to the physical form of the product, inhalation of dust is not likely.

3. Composition / Information on Ingredients

Components	CAS #	Percent
Carbon black	1333-86-4	0-25
C.I. Pigment blue 29	57455-37-5	0-20
Iron oxide	1309-37-1	0-20
Titanium dioxide (TiO ₂)	13463-67-7	0-15
Aluminium hydroxide	21645-51-2	1-10
29H,31H-phthalocyaninato(2-)-N29,N30,N31,N32 copper	147-14-8	0-10
Silicon dioxide	7631-86-9	0-10
Glycerin	56-81-5	1-5

Composition comments All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume. The product contains additional elements at concentrations below disclosure requirements.

4. First Aid Measures

First aid procedures
Eye contact Any material that contacts the eye should be washed out immediately with water. If easy to do, remove contact lenses. Get medical attention promptly if symptoms occur after washing.
Skin contact Wash skin with soap and water. Get medical attention promptly if symptoms occur after washing.

Inhalation If symptomatic, move to fresh air. Get medical attention if symptoms persist.
Ingestion Rinse mouth thoroughly with water and give large amounts of milk or water, if person is conscious. Get medical attention if any discomfort continues.
Notes to physician Treat symptomatically.

5. Fire Fighting Measures

Flammable properties This product is not flammable.
Extinguishing media
Suitable extinguishing media Water. Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).
Fire fighting equipment/instructions Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Hazardous combustion products During fire, gases hazardous to health may be formed.

6. Accidental Release Measures

Personal precautions Wear appropriate personal protective equipment (See Section 8).
Environmental precautions Avoid discharge into drains, water courses or onto the ground.
Methods for cleaning up Absorb spill with vermiculite or other inert material, then place in a sealed container for chemical waste. Used rags or other cleaning materials should be soaked with water and placed in a sealed container.
 Large Spills: Flush area with water. Prevent runoff from entering drains, sewers, or streams. Dike for later disposal.

7. Handling and Storage

Handling Avoid contact with skin and eyes. Observe good industrial hygiene practices.
Storage Keep container closed. Store in a cool place.

8. Exposure Controls / Personal Protection

Occupational exposure limits

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Aluminium hydroxide (21645-51-2)	TWA	1 mg/m3	Respirable fraction.
C.I. Pigment blue 29 (57455-37-5)	TWA	10 mg/m3	INHALABLE PARTICLES
		3 mg/m3	RESPIRABLE PARTICLES
Carbon black (1333-86-4)	TWA	3 mg/m3	Inhalable fraction.
Glycerin (56-81-5)	TWA	10 mg/m3	Mist
Iron oxide (1309-37-1)	TWA	5 mg/m3	Respirable fraction.
Titanium dioxide (TiO2) (13463-67-7)	TWA	10 mg/m3	

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
Carbon black (1333-86-4)	PEL	3.5 mg/m3	
Glycerin (56-81-5)	PEL	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.
Iron oxide (1309-37-1)	PEL	10 mg/m3	Fume.
Silicon dioxide (7631-86-9)	TWA	20 mppcf	
		0.8 mg/m3	
Titanium dioxide (TiO2) (13463-67-7)	PEL	15 mg/m3	Total dust.

Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2)

Components	Type	Value	Form
Carbon black (1333-86-4)	TWA	3.5 mg/m3	
Glycerin (56-81-5)	TWA	10 mg/m3	Mist.

Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2)

Components	Type	Value	Form
Iron oxide (1309-37-1)	TWA	5 mg/m ³	Respirable.
Titanium dioxide (TiO ₂) (13463-67-7)	TWA	10 mg/m ³	

Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended)

Components	Type	Value	Form
Aluminium hydroxide (21645-51-2)	TWA	1 mg/m ³	Respirable.
Carbon black (1333-86-4)	TWA	3.5 mg/m ³	
Glycerin (56-81-5)	TWA	3 mg/m ³	Respirable mist.
		10 mg/m ³	Mist.
Iron oxide (1309-37-1)	STEL	10 mg/m ³	Fume.
	TWA	5 mg/m ³	Dust.
		10 mg/m ³	Total dust.
		3 mg/m ³	Respirable fraction.
		5 mg/m ³	Fume.
Silicon dioxide (7631-86-9)	TWA	4 mg/m ³	Total
		1.5 mg/m ³	Respirable.
Titanium dioxide (TiO ₂) (13463-67-7)	TWA	3 mg/m ³	Respirable fraction.
		10 mg/m ³	Total dust.

Canada. Ontario OELs. (Ministry of Labor - Control of Exposure to Biological or Chemical Agents)

Components	Type	Value	Form
Carbon black (1333-86-4)	TWA	3.5 mg/m ³	
Glycerin (56-81-5)	TWA	10 mg/m ³	Mist.
Iron oxide (1309-37-1)	TWA	5 mg/m ³	Respirable.
Silicon dioxide (7631-86-9)	TWA	10 mg/m ³	
Titanium dioxide (TiO ₂) (13463-67-7)	TWA	10 mg/m ³	Total dust.

Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment)

Components	Type	Value	Form
Carbon black (1333-86-4)	TWA	3.5 mg/m ³	
Glycerin (56-81-5)	TWA	10 mg/m ³	Mist.
Iron oxide (1309-37-1)	TWA	10 mg/m ³	Total dust.
		5 mg/m ³	Dust and fume.
Silicon dioxide (7631-86-9)	TWA	6 mg/m ³	Respirable dust.
Titanium dioxide (TiO ₂) (13463-67-7)	TWA	10 mg/m ³	Total dust.

Mexico. Occupational Exposure Limit Values

Components	Type	Value	Form
Carbon black (1333-86-4)	STEL	7 mg/m ³	
	TWA	3.5 mg/m ³	
Glycerin (56-81-5)	TWA	10 mg/m ³	Mist.
Iron oxide (1309-37-1)	STEL	10 mg/m ³	
	TWA	5 mg/m ³	
Titanium dioxide (TiO ₂) (13463-67-7)	STEL	20 mg/m ³	
	TWA	10 mg/m ³	

Engineering controls Ensure adequate ventilation, especially in confined areas. Exposure limits apply to material in dry form where dust may become airborne.

Personal protective equipment

Eye / face protection Wear safety glasses with side shields (or goggles).

Skin protection Wear chemical-resistant gloves, footwear and protective clothing appropriate for risk of exposure. Contact glove manufacturer for specific information.

Respiratory protection	If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. In the United States of America, if respirators are used, a program should be instituted to assure compliance with OSHA 29 CFR 1910.134. Respirator type: Air-purifying respirator with an appropriate, government approved (where applicable), air-purifying filter, cartridge or canister.
General hygiene considerations	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical & Chemical Properties

Appearance	Paste.
Color	Variable in color.
Odor	Not available.
Odor threshold	Not available.
Physical state	Liquid.
Form	Paste.
pH	6 - 7
Melting point	Not available.
Freezing point	Not available.
Boiling point	212 °F (100 °C)
Flash point	> 932 °F (> 500 °C)
Evaporation rate	Not available.
Flammability limits in air, upper, % by volume	Not available.
Flammability limits in air, lower, % by volume	Not available.
Vapor pressure	Not available.
Vapor density	Not available.
Specific gravity	1.2 - 1.3 (20-30°C)
Solubility (water)	Not available.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.

10. Chemical Stability & Reactivity Information

Chemical stability	Material is stable under normal conditions.
Conditions to avoid	Excessive heat.
Incompatible materials	Strong oxidizing agents. Strong acids. Phenol.
Hazardous decomposition products	No hazardous decomposition products are known.
Possibility of hazardous reactions	Hazardous polymerization does not occur.

11. Toxicological Information

Toxicological data

Product	Test Results
12 PIECE WATERCOLOR PAINT SET (Mixture)	Acute Dermal LD50 Rabbit: 64199.9615 mg/kg estimated Acute Dermal LD50 Rabbit: 51.3602 g/kg estimated Acute Inhalation LC Rat: 194.5959 mg/l estimated Acute Oral LD50 Rat: 20563.1669 mg/kg estimated Acute Other LD50 Rat: 42799.8911 mg/kg estimated
Acute effects	Ingestion may cause irritation and malaise.

Local effects Prolonged skin contact may cause temporary irritation.
Sensitization No sensitizing effects known.
Carcinogenicity Inhalation of carbon black or titanium dioxide dust may cause cancer, however due to the physical form of the product, inhalation of dust is not likely.

ACGIH Carcinogens

Aluminium hydroxide (CAS 21645-51-2)	A4 Not classifiable as a human carcinogen.
Carbon black (CAS 1333-86-4)	A3 Confirmed animal carcinogen with unknown relevance to humans.
Iron oxide (CAS 1309-37-1)	A4 Not classifiable as a human carcinogen.
Titanium dioxide (TiO ₂) (CAS 13463-67-7)	A4 Not classifiable as a human carcinogen.

IARC Monographs. Overall Evaluation of Carcinogenicity

Carbon black (CAS 1333-86-4)	2B Possibly carcinogenic to humans.
Iron oxide (CAS 1309-37-1)	3 Not classifiable as to carcinogenicity to humans.
Silicon dioxide (CAS 7631-86-9)	3 Not classifiable as to carcinogenicity to humans.
Titanium dioxide (TiO ₂) (CAS 13463-67-7)	2B Possibly carcinogenic to humans.

Mutagenicity Not classified.
Reproductive effects Not classified.

12. Ecological Information

Ecotoxicological data

Product	Test Results
12 PIECE WATERCOLOR PAINT SET (Mixture)	LC50 Fish: 28311.062 mg/l 96 hours estimated
Ecotoxicity	Not expected to be harmful to aquatic organisms.
Persistence and degradability	No data available.
Bioaccumulation / Accumulation	No data available.
Partition coefficient (n-octanol/water)	Not available.
Mobility in environmental media	No data available.

13. Disposal Considerations

Disposal instructions Dispose of contents/container in accordance with local/regional/national/international regulations.
Contaminated packaging Since emptied containers may retain product residue, follow label warnings even after container is emptied.

14. Transport Information

DOT
 Not regulated as dangerous goods.
IATA
 Not regulated as dangerous goods.
IMDG
 Not regulated as dangerous goods.
TDG
 Not regulated as dangerous goods.

15. Regulatory Information

US federal regulations This product is not hazardous according to OSHA 29CFR 1910.1200. All components are on the U.S. EPA TSCA Inventory List.

TSCA Section 12(b) Export Notification(40 CFR 707, Subpt. D)
 Not regulated.

CERCLA (Superfund) reportable quantity (lbs) (40 CFR 302.4)
 None

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - Yes
 Delayed Hazard - Yes
 Fire Hazard - No
 Pressure Hazard - No
 Reactivity Hazard - No

Section 302 extremely hazardous substance (40 CFR 355, Appendix A) No

Section 311/312 (40 CFR 370) No

Drug Enforcement Administration (DEA) (21 CFR 1308.11-15) Not controlled

WHMIS status Controlled

WHMIS classification D2A - Other Toxic Effects-VERY TOXIC

WHMIS labeling



Inventory status

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	No
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	Yes
China	Inventory of Existing Chemical Substances in China (IECSC)	No
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	No
New Zealand	New Zealand Inventory	No
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

State regulations

WARNING: This product contains a chemical known to the State of California to cause cancer.

US - California Hazardous Substances (Director's): Listed substance

Carbon black (CAS 1333-86-4) Listed.
 Iron oxide (CAS 1309-37-1) Listed.
 Silicon dioxide (CAS 7631-86-9) Listed.

US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance

Carbon black (CAS 1333-86-4) Listed.

US - California Proposition 65 - CRT: Listed date/Carcinogenic substance

Carbon black (CAS 1333-86-4) Listed: February 21, 2003 Carcinogenic.

US - Massachusetts RTK - Substance: Listed substance

Carbon black (CAS 1333-86-4) Listed.
 Glycerin (CAS 56-81-5) Listed.
 Iron oxide (CAS 1309-37-1) Listed.
 Silicon dioxide (CAS 7631-86-9) Listed.
 Titanium dioxide (TiO2) (CAS 13463-67-7) Listed.

US - New Jersey RTK - Substances: Listed substance

29H,31H-phthalocyaninato(2-)-N29,N30,N31,N32 copper (CAS 147-14-8) Listed.
 Carbon black (CAS 1333-86-4) Listed.
 Glycerin (CAS 56-81-5) Listed.
 Iron oxide (CAS 1309-37-1) Listed.

Silicon dioxide (CAS 7631-86-9)	Listed.
Titanium dioxide (TiO ₂) (CAS 13463-67-7)	Listed.
US - Pennsylvania RTK - Hazardous Substances: Listed substance	
Carbon black (CAS 1333-86-4)	Listed.
Glycerin (CAS 56-81-5)	Listed.
Iron oxide (CAS 1309-37-1)	Listed.
Silicon dioxide (CAS 7631-86-9)	Listed.
Titanium dioxide (TiO ₂) (CAS 13463-67-7)	Listed.

16. Other Information

HMIS® ratings	Health: 1* Flammability: 1 Physical hazard: 0
NFPA ratings	Health: 1 Flammability: 1 Instability: 0
Disclaimer	The information in the sheet was written based on the best knowledge and experience currently available.
Issue date	07-08-2011

MATERIAL SAFETY DATA SHEET
*** GLITTER PLASTIC**

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

MANUFACTURER / SUPPLIER

GLITTEREX Corporation
7 Commerce Drive
Cranford, NJ 07016

Telephone: (908) 272-9121

PRODUCT NAME: ARTS AND CRAFTS GLITTER
PRODUCT DESCRIPTION: PVC GLITTER
PRODUCT USE: DECORATIVE APPLICATIONS

2. COMPOSITION / INFORMATION ON INGREDIENTS

COMPOSITION	APPROX. WT. %	CAS REG. NO.
Metallized polyvinyl chloride film Rigid film – contains no Phthalates	(Proprietary)	25085-82-9

3. HAZARDS

FLAMMABILITY -FLASH POINT ABOVE 200 DEGREES F
HEALTH – NON TOXIC ACMI/AP CERTIFIED
CHEMICAL REACTIVITY – SEE SECTION 10

4. FIRST AID MEASURES

INHALATION: Not usual route of entry.

EYES: Any material that contacts the eye should be washed out with water. Get medical attention if symptoms persist.

SKIN: Wash with soap and water.

INGESTION: Material is not expected to be absorbed from the gastrointestinal tract, so that induction of vomiting should not be necessary.

5. FIRE FIGHTING MEASURES

FIRE FIGHTING: Approved self-contained breathing apparatus and protective clothing should be used for all fires.

EXTINGUISHING MEDIA: Water, fog, carbon dioxide, dry chemical.

HAZARDOUS COMBUSTION PRODUCTS: Heated to decomposition, normal products of combustion will be formed.

FLASH POINT:	ABOVE 200 DEGREES F
LOWER FLAMMABLE LIMIT:	NOT ESTABLISHED
UPPER FLAMMABLE LIMIT:	NOT ESTABLISHED
AUTO IGNITION TEMPERATURE:	NOT AVAILABLE

EXPLOSION DATA:
IMPACT SENSITIVITY: NOT SENSITIVE TO MECHANICAL IMPACT
STATIC DISCHARGE: NOT SENSITIVE TO STATIC DISCHARGE

6. ACCIDENTAL RELEASE MEASURES

Sweep or gather up material and place in proper container.

7. HANDLING AND STORAGE

HANDLING: No special precautionary measures should be needed under anticipated conditions of use. Minimize dust generation and accumulation. Refer to NFPA Pamphlet No. 654, "Prevention of fire and dust Explosions in the Chemical, Dye, Pharmaceutical, and Plastics Industries."

STORAGE: Store away from excessive heat and sources of ignition. No other precautionary measures should be needed under anticipated conditions of use.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE LIMIT INFORMATION:

VENTILATION: Good general ventilation should be used.

EYE PROTECTION: Use safety glasses.

SKIN PROTECTION: Wear cotton, canvas or leather gloves.

RESPIRATORY: When dust or powder from secondary operations are not adequately controlled, use respirator approved for protection from dust.

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE:	GLITTER
COLOR:	VARIOUS COLORS
ODOR:	MILD
MELTING POINT:	ABOVE 180 DEGREES F
VAPOR PRESSURE:	NEGLECTIBLE
VAPOR DENSITY (AIR=1):	NOT APPLICABLE
SPECIFIC GRAVITY (WATER=1):	1.35 TO 1.45
WATER SOLUBILITY:	INSOLUBLE
% VOLATILES:	NEGLECTIBLE
pH:	NOT APPLICABLE
EVAPORATION RATE:	NOT APPLICABLE

10. STABILITY AND REACTIVITY

STABILITY: Stable under recommended conditions of storage and handling.

REACTIVITY: Avoid contact with acids, alkalis and strong oxidizing agents.

11. TOXICOLOGICAL INFORMATION

EYES: Product not considered primary eye irritant, and expected to be a low hazard for usual industrial or commercial handling by trained personnel.

SKIN: Product not considered to be primary skin irritant.

INGESTION: Expected to be a low ingestion hazard.

INHALATION: Product not considered a hazard for usual handling by trained personnel.

12. ECOLOGICAL INFORMATION

Not expected to present any adverse environmental effects.

13. DISPOSAL INFORMATION

Product is not a RCRA hazardous waste. Landfill or incinerate in accordance with federal, state or local requirements.

14. TRANSPORTATION INFORMATION

US DOT HAZARD CLASSIFICATION: Not Regulated.

15. REGULATORY INFORMATION

OSHA hazardous chemical(s) according to 29 CFR 1910.1200: None.

WHMIS (Canada) Status: Not a controlled product.

WHMIS (Canada) Ingredients Disclosure List: None.

Chemical(s) subject to the reporting requirements of Section 313 or Title III of SARA of 1986 and 40CFR 372: None.

SARA Sections 311 and 312 hazard classification(s): N/A.

US Toxic Substances Control Act (TSCA): All Components of this product are listed or are excluded from listing on the TSCA Chemical Substance Inventory.

Material(s) known to the State of California to cause cancer: None

Material(s) known to the State of California to cause adverse reproductive effects: None

New Jersey Workplace Hazardous Substance List: None

Pennsylvania Hazardous Substance List: None

16. OTHER INFORMATION

The above information and recommendations are believed accurate and reliable. The GLITTEREX Corporation makes no warranty of any kind, either express or implied, including merchantability and fitness. Users should consider these data only as a supplement to other information available from all sources, and should incorporate these into programs for the proper use and disposal of these materials and the safety and health of employees and customers.

Product Number: 864AC
Issuing Date: March 4, 2014

Revision Date: None

Product Name: 50% Isopropyl Rubbing Alcohol
Revision Number: 0



VI·JON[®]

Safety Data Sheet
for Health and Beauty Products

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKER

Product identifier

Product Name: 50% Isopropyl Rubbing Alcohol
Item Number: 864AC

Other means of identification

Synonyms: None

Recommended use of the chemical and restrictions on use

Recommended Use: First Aid
Uses advised against: No information available

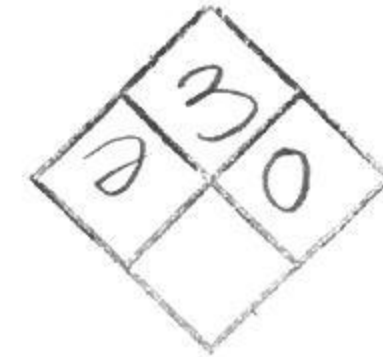
Details of the supplier of the safety data sheet

Supplier Address

Vi-Jon Inc.
8515 Page Avenue
Saint Louis
MO
63114
US
Phone:18004249300
Fax:3144271010
Contact:Paula Korman
Email:pkorman@vijon.com
Contact Phone3145921474

Emergency telephone number Chemtrec: 1-800-424-9300 (24-Hour)

ASSURED RUBBING ALCOHOL
Vi-Jon Inc
800-424-9300



Product Number: 864AC
Issuing Date: March 4, 2014

Revision Date: None

Product Name: 50% Isopropyl Rubbing Alcohol
Revision Number: 0

2. HAZARDS IDENTIFICATION FOR INDUSTRIAL SETTING


Classification

This product contains a chemical or chemicals considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.122).

Specific target organ toxicity (single exposure)	Category 3
Flammable liquids	Category 3

GHS Label elements, including precautionary statements

Emergency Overview

Signal word	Warning
Hazard statements May cause drowsiness or dizziness Flammable liquid and vapor	
	
Appearance Clear, Colorless, Water thin liquid	Physical State Water thin liquid
	Odor Alcohol

Precautionary Statements - Prevention

Avoid breathing fume/gas/mist/vapors/spray
Use only outdoors or in a well-ventilated area
Keep away from heat/sparks/open flames/hot surfaces. - No smoking
Keep container tightly closed
Ground/bond container and receiving equipment
Use explosion-proof electrical/ventilating/lighting/equipment
Use only non-sparking tools
Take precautionary measures against static discharge
Wear protective gloves/protective clothing/eye protection/face protection
Keep cool

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.
If eye irritation persists: Get medical advice/attention.

Inhalation

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
Call a POISON CENTER or doctor/physician if you feel unwell.

Fire

In case of fire: Use CO2, dry chemical, or foam for extinction.

Precautionary Statements - Storage

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

Product Number: 864AC
Issuing Date: March 4, 2014

Revision Date: None

Product Name: 50% Isopropyl Rubbing Alcohol
Revision Number: 0

Precautionary Statements - Disposal

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

Hazards not otherwise classified (HNOC)

Not Applicable

Unknown Toxicity

0% of the mixture consists of ingredient(s) of unknown toxicity

Other information

Prolonged or repeated contact may dry skin and cause irritation

Interactions with Other Chemicals

No information available

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No	Weight %	Trade Secret
Isopropyl Alcohol 50% v/v	67-63-0	10-50	*
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

Eye Contact

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Do not rub affected area. Remove contact lenses, if applicable, and continue flushing. If symptoms persist, call a physician.

Skin Contact

In the case of skin irritation or allergic reactions see a physician.

Inhalation

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

Ingestion

Do NOT induce vomiting. Clean mouth with water and afterwards drink plenty of water. Never give anything by mouth to an unconscious person. Consult a physician.

Protection of First-aiders

Use personal protective equipment. Remove all sources of ignition. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. For personal protection see Section 8.

Most important symptoms and effects, both acute and delayed

Most Important Symptoms/Effects

Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting

Indication of any immediate medical attention and special treatment needed

Notes to Physician

Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Dry chemical. Carbon dioxide (CO₂). Water spray. Alcohol-resistant foam.

Unsuitable Extinguishing Media

Do not use a solid water stream as it may scatter and spread fire.

Specific Hazards Arising from the Chemical

Keep product and empty container away from heat and sources of ignition. Risk of ignition. In the event of fire, cool tanks with water spray. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations

Uniform Fire Code	Flammable Liquid: I-B Irritant: Liquid
--------------------------	---

Hazardous Combustion Products

Carbon oxides.

Explosion Data

Sensitivity to Mechanical Impact	No
---	----

Sensitivity to Static Discharge	Yes
--	-----

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Move containers from fire area if you can do it without risk.

6. ACCIDENTAL RELEASE MEASURES FOR INDUSTRIAL SETTING

Personal precautions, protective equipment and emergency procedures

Personal Precautions

Ensure adequate ventilation. Use personal protective equipment. Evacuate personnel to safe areas. Refer to Section 8 Avoid contact with skin, eyes and clothing. Keep people away from and upwind of spill/leak. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Pay attention to flashback. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Do not touch or walk through spilled material.

Other Information

Refer to protective measures listed in Sections 7 and 8. Ventilate the area.

Environmental precautions

Environmental Precautions

Refer to protective measures listed in Sections 7 and 8. Prevent further leakage or spillage if safe to do so. Prevent product from entering drains.

Methods and material for containment and cleaning up

Methods for Containment

Prevent further leakage or spillage if safe to do so. Do not touch or walk through spilled material. A vapor suppressing foam may be used to reduce vapors. Dike far ahead of spill to collect runoff water. Stop spill from entering drains, sewers, streams, or waterways.

Methods for Cleaning Up

Dam up. Soak up with inert absorbent material. Pick up and transfer to properly labeled containers. Take precautionary measures against static discharges.

7. HANDLING AND STORAGE FOR INDUSTRIAL SETTING

Precautions for safe handling

Handling

Handle in accordance with good industrial hygiene and safety practice. Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Avoid breathing vapors or mists. Keep away from heat, sparks and open flame. No smoking.

Conditions for safe storage, including any incompatibilities

Storage

Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat and sources of ignition. Keep in properly labeled containers. Do not store near combustible materials. Keep in an area equipped with sprinklers. Store in accordance with the particular national regulations. Store in accordance with local regulations.

Incompatible Products

Strong oxidizing agents. Acids. Chlorinated compounds.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION FOR INDUSTRIAL SETTING

Control parameters

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Isopropyl Alcohol 67-63-0	STEL: 400 ppm TWA: 200 ppm	TWA: 400 ppm TWA: 980 mg/m ³ (vacated) TWA: 400 ppm (vacated) TWA: 980 mg/m ³ (vacated) STEL: 500 ppm (vacated) STEL: 1225 mg/m ³	IDLH: 2000 ppm 10% LEL TWA: 980 mg/m ³ TWA: 400 ppm STEL: 500 ppm STEL: 1225 mg/m ³

ACGIH TLV: American Conference of Governmental Industrial Hygienists - Threshold Limit Value. OSHA PEL: Occupational Safety and Health Administration - Permissible Exposure Limits. NIOSH IDLH: Immediately Dangerous to Life or Health.

Other Exposure Guidelines

Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992). See section 15 for national exposure control parameters.

Appropriate engineering controls

Engineering Measures

Showers
Eyewash stations
Ventilation systems

Individual protection measures, such as personal protective equipment

Eye/Face Protection

Tightly fitting safety goggles.

Skin and Body Protection

Wear protective gloves/clothing. Long sleeved clothing. Chemical resistant apron. Impervious gloves. Antistatic boots

Respiratory Protection

No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke when using this product. Contaminated work clothing should not be allowed out of the workplace. Provide regular cleaning of equipment, work area and clothing. Wash hands before breaks and immediately after handling the product.

Product Number: 864AC
Issuing Date: March 4, 2014

Revision Date: None

Product Name: 50% Isopropyl Rubbing Alcohol
Revision Number: 0

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical Properties

Physical State	Water thin liquid	Odor	Alcohol
Appearance	Clear, Colorless, Water thin liquid	Odor Threshold	No information available
Color	No information available		
Property	Values	Remarks/ Method	
pH	No data available	None known	
Melting/freezing point	No data available	None known	
Boiling Point/Range	No data available	None known	
Flash Point	22C / 72F	None known	
Evaporation rate	No data available	None known	
Flammability (solid, gas)	No data available	None known	
Flammability Limits in Air			
Upper flammability limit	No data available		
Lower flammability limit	No data available		
Vapor pressure	No data available	None known	
Vapor density	No data available	None known	
Specific Gravity	No data available	None known	
Water Solubility	Miscible with water	None known	
Solubility in other solvents	No data available	None known	
Partition coefficient: n-octanol/water		None known	
Autoignition temperature	No data available	None known	
Decomposition temperature	No data available	None known	
Kinematic viscosity	No data available	None known	
Dynamic viscosity		None known	
Explosive Properties	No data available		
Oxidizing Properties	No data available		
Other Information			
Softening Point	No data available		
VOC Content (%)	No data available		

10. STABILITY AND REACTIVITY FOR INDUSTRIAL SETTING

Reactivity

No data available.

Chemical stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Hazardous Polymerization

Hazardous polymerization does not occur.

Conditions to avoid

Heat, flames and sparks.

Incompatible materials

Strong oxidizing agents. Acids. Chlorinated compounds.

Hazardous Decomposition Products

Carbon oxides.

When used in accordance with the directions.

11. TOXICOLOGICAL INFORMATION FOR INDUSTRIAL SETTING

There is no data for this product. The information included in this section describes the potential hazards of the individual ingredients.

Information on likely routes of exposure

Product Information

Inhalation May cause drowsiness and dizziness.
Eye Contact Irritating to eyes.
Skin Contact There is no data available for this product.
Ingestion There is no data available for this product.

Component Information

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Isopropyl Alcohol 67-63-0	= 4396 mg/kg (Rat)	= 12800 mg/kg (Rabbit)	= 16000 ppm (Rat) 8 h

Information on toxicological effects

Symptoms Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting

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

Sensitization No information available.
Mutagenic Effects No information available.

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

Chemical Name	ACGIH	IARC	NTP	OSHA
Isopropyl Alcohol 67-63-0		Group 3		X

*IARC: (International Agency for Research on Cancer)
 Group 3 - Not Classifiable as to Carcinogenicity in Humans
 OSHA: (Occupational Safety & Health Administration)
 X - Present*

Reproductive Toxicity No information available.
STOT - single exposure No information available.
STOT - repeated exposure No information available.
Chronic Toxicity No known effect based on information supplied.
Target Organ Effects Eyes. Respiratory system. Skin. Central nervous system (CNS).
Aspiration Hazard No information available.

Numerical measures of toxicity Product Information

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral)
 10,366.00 mg/kg
ATEmix (dermal)
 30,182.00 mg/kg (ATE)
ATEmix (inhalation-vapor)
 37,727.00ATEmix

Product Number: 864AC
Issuing Date: March 4, 2014

Revision Date: None

Product Name: 50% Isopropyl Rubbing Alcohol
Revision Number: 0

12. ECOLOGICAL INFORMATION FOR INDUSTRIAL SETTING

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

The environmental impact of this product has not been fully investigated.

Persistence and Degradability

No information available.

Bioaccumulation

No information available.

Other Adverse Effects

No information available.

13. DISPOSAL CONSIDERATIONS FOR INDUSTRIAL SETTING

Waste treatment methods

Waste Disposal Methods This material, as supplied, is not a hazardous waste according to Federal regulations (40 CFR 261).

Contaminated Packaging Dispose of in accordance with local regulations.

US EPA Waste Number D001

California Hazardous Waste Codes 212

This product contains one or more substances that are listed with the State of California as a hazardous waste.

Chemical Name	California Hazardous Waste
Isopropyl Alcohol 67-63-0	Toxic Ignitable

14. TRANSPORT INFORMATION

DOT
Proper Shipping Name CONSUMER COMMODITY
Hazard Class ORM-D
Subsidiary Class
Description CONSUMER COMMODITY, ORM-D
Emergency Response Guide Number 129

TDG
UN-No UN1219
Proper Shipping Name ISOPROPANOL SOLUTION
Hazard Class 3
Packing Group II
Description UN1219, ISOPROPANOL, 3, II

MEX
UN-No UN1219
Proper Shipping Name ISOPROPANOL SOLUTION
Hazard Class 3
Packing Group II
Description UN1219 ISOPROPANOL, 3, II

ICAO
UN-No UN1219
Proper Shipping Name ISOPROPANOL SOLUTION
Hazard Class 3
Packing Group II
Description UN1219, ISOPROPANOL, 3, II

IATA
UN-No UN1219
Proper Shipping Name ISOPROPANOL SOLUTION

Product Number: 864AC
Issuing Date: March 4, 2014

Revision Date: None

Product Name: 50% Isopropyl Rubbing Alcohol
Revision Number: 0

15. REGULATORY INFORMATION FOR INDUSTRIAL SETTING

International Inventories

TSCA Exempt
DSL All components are listed either on the DSL or NDSL.

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

U.S. Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

Chemical Name	CAS-No	Weight %	SARA 313 - Threshold Values %
Isopropyl Alcohol - 67-63-0	67-63-0	10-50	1.0

SARA 311/312 Hazard Categories

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

Clean Water Act

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

CERCLA

This material, as supplied, does not contain any ingredients regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302).

U.S. State Regulations

California Proposition 65 - NONE

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania	Rhode Island	Illinois
Isopropyl Alcohol 67-63-0	X	X	X	X	

International Regulations

Mexico - Grade No information available.

National occupational exposure limits

Chemical Name	Carcinogen Status	Exposure Limits
Isopropyl Alcohol		Mexico: TWA 400 ppm Mexico: TWA 980 mg/m ³ Mexico: STEL 500 ppm Mexico: STEL 1225 mg/m ³

Canada

WHMIS Hazard Class

B2
D2B



Product Number: 864AC
Issuing Date: March 4, 2014

Revision Date: None

Product Name: 50% Isopropyl Rubbing Alcohol
Revision Number: 0

16. OTHER INFORMATION

NFPA	Health Hazard 2	Flammability 3	Instability 0	Physical and Chemical Hazards - None
HMIS	Health Hazard 2	Flammability 3	Physical Hazard 0	Personal Protection X

Prepared By WERCS Professional Services, LLC
23 British American Blvd.
Latham, NY 12110
1-800-572-6501

Issuing Date March 4, 2014

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 Material Safety Data Sheet (MSDS) 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 MSDS. 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

MATERIAL SAFETY DATA SHEET

SECTION 1 – CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Identifier SKU 903083 – 8oz. Assured Hand Sanitizer with Vitamin E and Aloe		[WHMIS Classification] Health: 0 Fire: 3 Physical Hazard: 0	
Product Use Hand Sanitizer			
Manufacturer's Name Ningbo Cleaner Daily-Used Chemical Products Co., Ltd.		Supplier's Name American Consumer Products, LLC	
Street Address No. 166 North Xinghai Road, Scientific & Technological Zone		Street Address 10883 Kinross Avenue	
City Ninghai, Ningbo	Province Zhejiang	City Los Angeles	Province / State California
Postal Code 315600	Emergency Telephone +86-574-65339152	Postal Code 90024	Emergency Telephone 310-443-3330
Date MSDS Prepared October 11, 2008		MSDS Prepared By Yang Jianping	Phone Number +86-574-65339152

SECTION 2 – COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Ingredient	LD ₅₀ of Ingredient (specify species and route)	LC ₅₀ of Ingredient (specify species and route)
Ethyl Alcohol	Oral: LD ₅₀ Rat: 1501 mg/kg	Inhalation LC ₅₀ Rat: 124.7 mg/L/4/H

Hazardous Ingredient	CAS No.	%	OSHA PEL (g/m ³)	ACGIH TLV (mb/m ³)
Ethyl Alcohol	64-17-5	62%	OEL 1000 mg/m ³	

Other Ingredient	CAS No.	%	OSHA PEL (g/m ³)	ACGIH TLV (mb/m ³)
Water	7732-18-5	≥36%	N/E	N/E
Carbomer	9003-01-4	0.2 – 0.5%	N/E	N/E
Glycerin	56-81-5	0.2 – 0.5%	5 mg/m ³ as mist	10 mg/m ³ as mist
Propylene Glycol	57-55-6	0.2 – 0.5%	N/E	N/E
Triethanolamine	102-71-6	.4 – 1%	N/E	N/E

PEL = Permissible Exposure Limit, TLV = Threshold Limit Value

OEL = Occupational Exposure Limit, N/A = Not Applicable/ Not Available

OSHA Hazardous Components (29 CFR 1910.1200): N/E = Not Established

Product: SKU 903083 Boz. Assured Hand Sanitizer with Vitamin E & Aloe

SECTION 3 – HAZARDS IDENTIFICATION

Route of Entry <input checked="" type="checkbox"/> Skin Contact <input type="checkbox"/> Skin Absorption <input checked="" type="checkbox"/> Eye Contact <input checked="" type="checkbox"/> Inhalation <input checked="" type="checkbox"/> Inhalation
[Emergency Overview] Due to the ethyl alcohol content, this product is flammable in large quantities. Dangerous fire hazard when exposed to head, sparks, flame or oxidants. Eye and mucous membrane irritant.
[WHMIS Symbols]
[Potential Health Effects] This product is considered safe for its intended use. Skin: Allergic or sensitivity reactions are possible, causing irritation or redness. Eye: Irritation, burning/stinging. Use of this product should be discontinued any time a reaction occurs. Ingestion: Unlikely to occur due to the physical properties of the product. A physician, emergency room or Poison Control Center should be called anytime the product is ingested orally. Inhalation: May cause irritation of the nasal mucosa and respiratory tract. Note: Read the entire MSDS for a more thorough evaluation of the hazards.

SECTION 4 – FIRST AID MEASURES

Skin Contact If skin irritation, allergic reaction or rash occur, remove contaminated clothing if required, then physically remove as much of the product as possible and thoroughly flush the area with water. If irritation persists, seek medical attention.
Eye Contact Remove the product if worn. Immediately rinse eyes with plenty of water, occasionally lifting upper and lower lids, until no evidence of product remains. Get medical attention if pain or irritation persists.
Inhalation Remove to fresh air. If not breathing, perform artificial respiration. If breathing is difficult, give oxygen. Obtain appropriate medical attention.
Ingestion Product is water miscible with low toxicity. Do not induce vomiting as aspiration of the product might occur. Drink large amounts of water. In cases where the ingestion of a large amount is suspected, experienced medical personnel may perform gastric lavage.

SECTION 5 – FIRE FIGHTING MEASURES

Flammable <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes, under which conditions This product is combustible. Considered to be a fire hazard.	
Means of Extinction ABC all purpose extinguisher, water, CO2, alcohol-resistant foam		
Flashpoint (°C) and Method 30.2°C (PMCC method)	Upper Flammable Limit (% by volume) N/A	Lower Flammable Limit (% by volume) N/A
Autoignition Temperature(°C) N/A	Explosion Data – Sensitivity to Impact N/A	Explosion Data – Sensitivity to Static Discharge N/A
Special Fire Fighting Procedures: Wear a self-contained breathing apparatus in pressure-demand, MSHA-NIOSH (approved or equivalent), and full protective clothing. Fight fire from the maximum distance. Evacuate area.		
Unusual Fire and Explosion Hazards: Large quantities are flammable and vapors form explosive mixtures with air. Dangerous when exposed to heat, sparks, flame or oxidants		
[NFPA] Health: 0 Flammability: 3 Reactivity: 0 Special Hazard: None		

Product: SKU 903083 8oz. Assured Hand Sanitizer with Vitamin E & Aloe

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Leak and Spill Procedures

Small spills: Absorb with paper, towel or other appropriate media. Use soap and water to clean the area.

Large Spills: Collect in a suitable container or by use of an absorbent pad. Keep product out of drains; prevent entry to surface water, groundwater and soil.

Spills and releases may have to be reported to Federal and/or local authorities. See the Regulatory Information section (XV) regarding reporting requirements.

SECTION 7 – HANDLING AND STORAGE

Handling Procedures and Equipment

Keep far away from fire sources. Avoid heating product when handling. Washing thoroughly after handling.

Avoid contact with eyes and ingestion.

Storage Requirements

Store in a cool, dry and well-ventilated area and away from sources of ignition, excessive heat and direct sunlight.

Keep container closed when not in use. Separate from strong oxidizers. Put it lightly when packing and transport, prevent the packing and container from damage.

SECTION 8 – EXPOSURE CONTROL / PERSONAL PROTECTION

Exposure Limits

ACGIH TLV OSHA PEL Other (specify)

Specific Engineering Controls (such as ventilation, enclosed process)

The following information assumes large quantities of the product such as might be encountered in warehouse storage or an industrial accident.

Ventilation: Use general or local exhaust.

Eye/Face Protection: Safety glasses are required to prevent eye contact where splashing of product may occur.

Respiratory Protection: Airborne concentrations should be kept to lowest levels. If vapor is generated, use respirator approved by OSHA or NIOSH as appropriate.

Protective Clothing: Protective clothing is required where repeated or prolonged skin contact may occur. Wash after use and before eating, drinking or smoking.

Skin Protection: Chemical-resistant gloves are required where repeated or prolonged skin contact may occur.

Work/Hygienic Practices: After completing work, taking off the clothes and having a bath, avoiding a long-term exposure

Personal Protective Equipment

None required under normal conditions.

Gloves Respirator Eye Footwear Clothing Other

If checked, please specify type

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Physical State Transparent Gel	Odor and appearance Alcohol with citrus scent	Odor threshold (ppm) N/A
Specific Gravity .897	Vapour Density (air=1) N/A	Vapour Pressure (mmHg) N/A
Evaporation Rate	Boiling Point (°C) 80°C	Freezing Point (°C)
pH 6.5-8.5	Coefficient of Water/Oil Distribution N/A	[Solubility in Water] Soluble

Product: SKU 903083 8oz. Assured Hand Sanitizer with Vitamin E & Aloe

SECTION 10 – STABILITY AND REACTIVITY

Chemical Stability <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If no, under which conditions
Incompatibility with Other substances <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes, which ones? Strong oxidizers
Reactivity and under what conditions? Avoid direct sunlight, excessive heat and physical damage.	
Hazardous Decomposition Products Carbon Dioxide and Carbon Monoxide may produce during pyrolysis.	
Hazardous Polymerization Will not occur.	

SECTION 11 – TOXICOLOGICAL INFORMATION

Effects of Acute Exposure No acute or chronic effects under normal conditions of use.	
Effects of Chronic Exposure Chronic ingestion of ethyl alcohol can cause reproductive/developmental and liver disorders	
Irritancy of Product See Section 3	
Skin Sensitization	Respiratory Sensitization
Carcinogenicity - IARC Not established.	Carcinogenicity - ACGIH Not established.
Embryotoxicity Not available.	Teratogenicity Not available
Name of Synergistic Products / Effects Not available	Mutagenicity Not available

SECTION 12 – ECOLOGICAL INFORMATION

[Aquatic Toxicity] N/A
Environmental Toxicity On the basis of available information, this product is biodegradable and not expected to produce any significant adverse environmental effects when recommended use instructions are followed.

SECTION 13 – DISPOSAL CONSIDERATIONS

Waste Disposal Recover or recycle if possible. Material should be disposed of by placing in a landfill or by incineration in accordance with relevant Federal, State and Local regulations. This product meets the definition of hazardous waster as defined in 40 CFR 261.11.

SECTION 14 – TRANSPORT INFORMATION

Special Shipping Information Packaged Product: DOT Class Consumer Commodity ORM-D Bulk Product: UN – No1170 Packing group – II (Medium danger) Hazard Class – 3.0 (Flammable Liquid)	
TDG	[DOT]
[IMO]	[ICAO]

Product: SKU 903083 8oz. Assured Hand Sanitizer with Vitamin E & Aloe

SECTION 15 – REGULATORY INFORMATION

{WHMIS Classification}	{OSHA}
{SERA}	{TSCA} All components of this product are listed or are exempted or excluded from listing on the US Toxic Substances Control Act (TSCA) chemical substance inventory.

SECTION 16 – OTHER INFORMATION

<p>MSDS History Effective Date: 12/1/2008 Supersedes Date: 12/1/2009 Changes since last revision: MSDS created for each SKU. Updated the LD₅₀/LC₅₀ of ingredient</p> <p>IMPORTANT: The information and date herein are believed to be accurate but does not purport to be all inclusive and shall be used only as a guide. However, ACP makes no representation as to the comprehensiveness or accuracy of the information. It is expected that individuals receiving the information will exercise their independent judgment in determining its appropriateness for a particular purpose.</p>
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Material Safety Data Sheet

Complies with OSHA's Hazard Communication Standard 29 CFR 1910.1200

NFPA Fire: 0
Health: 1
Reactivity: 0

SECTION I - IDENTITY AND MANUFACTURER'S INFORMATION

Manufacturer's Name, Address: Franklin Cleaning Technology - PO Box 214 Great Bend KS 67530

Product Name: Atra Glow

Product Number: R4652

Chemical Family: Aqueous emulsion of polymers.

Package Size: 5 Gallons

EPA Reg. No: n/a

Emergency Telephone No. 620-792-1711

Preparer: Bill Dayton

Date: 11/19/02

Signature:

SECTION II - HAZARDOUS INGREDIENTS IDENTITY INFORMATION

Hazardous Components	CAS#	OSHA TWA	ACGIH TWA	Percent
*Diethylene glycol methyl ether	111-77-3			
*Water	7732-18-5			
*Styrene acrylate polymer	65415-61-0			
*Polyethylene	68441-17-8			
*Polyethylene	9002-88-4			

SECTION III - PHYSICAL AND CHEMICAL CHARACTERISTICS

No Physical Hazards	<input checked="" type="checkbox"/>	Flammable Gas	<input type="checkbox"/>	Flammable Liquid/Solid	<input type="checkbox"/>	Water Reactive	<input type="checkbox"/>
Combustible	<input type="checkbox"/>	Flammable Aerosol	<input type="checkbox"/>	Pyrophoric	<input type="checkbox"/>	Oxidizer	<input type="checkbox"/>
Compressed Gas	<input type="checkbox"/>	Explosive	<input type="checkbox"/>	Unstable - Reactive:	<input type="checkbox"/>	Organic Peroxide	<input type="checkbox"/>

Boiling Point, °F: 212F

Solubility in Water: Dispersible

Evaporation Rate: 1

Vapor Pressure: Unknown

Specific Gravity (water =1): 1.033

pH: 8.9

Vapor Density: Unknown

%Volatiles by Weight: 79.5

Appearance and Odor: Off-white emulsion with ammonia odor

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method): None

Flammable Limits: LEL: n/a

UEL: n/a

Extinguishing Media: n/a

Special Fire: None

Fighting Procedures:

Unusual Fire and: None

Explosion Hazards:

SECTION V - REACTIVITY DATA

Stability: Unstable Conditions to Avoid: n/a
Stable

Incompatibility: Do not mix with any other material.
(Materials to Avoid)

Hazardous Decomposition: None

Products or Byproducts:

Hazardous Polymerization: May Occur: Will Not Occur:

Conditions to Avoid: n/a

Comments:

*Added to comply with the Pennsylvania Worker Right to Know Act of 1984 & the New Jersey Worker & Community Right to Know Act of 1983.

SECTION VI - HEALTH HAZARD DATA

R4652 R4652

Route (s) of entry: Inhalation Skin: Eye: Ingestion:

No Health Hazard	<input type="checkbox"/>	Reproductive toxin	<input type="checkbox"/>	Sensitizer	<input type="checkbox"/>
Toxic	<input type="checkbox"/>	Irritant	<input type="checkbox"/>	Carcinogen	<input type="checkbox"/>
Highly Toxic	<input type="checkbox"/>	Corrosive	<input type="checkbox"/>	See Target Organs	<input checked="" type="checkbox"/>

TARGET ORGANS

Lungs	<input type="checkbox"/>	Eyes	<input checked="" type="checkbox"/>	Blood	<input type="checkbox"/>	Teratogen	<input type="checkbox"/>	Mucous Membranes	<input checked="" type="checkbox"/>
Heart	<input type="checkbox"/>	Skin	<input checked="" type="checkbox"/>	Liver	<input type="checkbox"/>	Central Nervous System	<input type="checkbox"/>	Autonomic Nervous System	<input type="checkbox"/>
Kidney	<input type="checkbox"/>	Prostate	<input type="checkbox"/>	Mutagen	<input type="checkbox"/>	Cardiovascular System	<input type="checkbox"/>	Respiratory System	<input checked="" type="checkbox"/>

Carcinogenicity: None Known NTP: IARC: OSHA Regulated

Medical Conditions Generally Aggravated by Exposure:
None Known

Signs and Symptoms of Exposure:
May cause eye irritation.

Emergency and First Aid Procedures:
If in eyes or on skin, immediately flush with plenty of water for at least 15 minutes. Get medical attention if irritation persists.
If swallowed, get medical attention. If inhaled, remove to fresh air. Get medical attention.

SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE

Steps to be taken in case material is released or spilled:
Small Spill: Mop up with detergent, rinse with water. Large Spill: Mop up, absorb with an inert absorbent, dike or turn container over as applicable.

Waste Disposal Method:
Small Amount: Dispose in trash container. Large Amount: Dispose in accordance with Local, State and Federal regulations.

Potential EPA Hazardous Waste Code(s): n/a

Steps to be taken in handling and storage:
Store at 40 - 90F. Protect from freezing. Read and follow label use directions. Keep out of reach of children.

SECTION VIII - CONTROL MEASURES

Respiratory Protection(Specify Type):
None required

Ventilation: Local Exhaust: Special:
Mechanical: Recommended

Protective Gloves: Optional Eye Protection: Recommended

Other Protective Clothing and Equipment:
None required

SECTION IX - SHIPPING INFORMATION

DOT Proper Shipping Name and Number:
Not regulated

NE = Not Established
N/A = Not Applicable

Material Safety Data Sheet

Name : **Awesome Orange All Purpose Cleaner & Degreasers**

Date Issued : 9/20/04

US MANUFACTURER:

Awesome Products Inc.

Phone : 1-800-482-2875

6370 Altura Blvd., Buena Park, CA 90620

Emergency Phone : 714-562-8873

Hazard Rating	HMSIS	Hazard	NFPA
4 - Very High	1	Health	1
3 - High	0	Flammability	0
2 - Moderate	0	Reactivity	0
1 - Slight		Special	
0 - Insignificant			

SECTION 1 - PRODUCT IDENTIFICATION

PRODUCT NAME

All Purpose Cleaner & Degreaser

REASON FOR CHANGE

Formulation Revised.

PRODUCT USE

Home care cleaning product

PRODUCT DESCRIPTION

22 oz Awesome Orange All Purpose Cleaner and Degreaser

28 oz Awesome Orange All Purpose Cleaner and Degreaser

32 oz Awesome Orange All Purpose Cleaner and Degreaser

SECTION 2 - INGREDIENT INFORMATION

Weight %	Ingredient & Exposure Limit
0.1 to 0.5	Orange Oil (CAS # 8008-57-9)
0.5 to 3.0	Ethoxylated Alcohol (CAS # 68131-39-5)
0.5 to 3.0	Butyl Ethanol (CAS # 64-17-5)
0.5 to 2.0	Disodium Metasilicate (CAS # 6834-92-0)
0.5 to 2.0	Trisodium Phosphate (CAS # 10101-89-0)
0.5 to 0.8	Sodium Hydroxide (CAS # 1310-73-2)
88 to 98	Water (CAS # 7732-18-5)

Material Safety Data Sheet

Name : **Awesome Orange All Purpose Cleaner & Degreasers**

Date Issued : 9/20/04

SECTION 3 - HEALTH HAZARDS IDENTIFICATION (Also see Section 11)

ROUTE(S) OF ENTRY

Effects of Acute Exposure

Eye

May Cause : Mild eye irritation.

Skin

Prolonged or repeated contact may cause : Irritation

Inhalation

None Known

Ingestion

None Known.

MEDICAL CONDITIONS GENERALLY RECOGNIZED AS BEING AGGRAVATED BY EXPOSURE

None Known.

SECTION 4 - FIRST AID MEASURES

EYE CONTACT

Flush immediately with plenty of water for at least 15 to 20 minutes.

If irritation persists, get medical attention.

SKIN CONTACT

Rinse with plenty of water

INHALATION

No special requirements.

INGESTION

Immediately drink 1-2 glasses of water or milk. Seek immediate medical attention.

SECTION - 5 - FIRE AND EXPLOSION INFORMATION

FLASH POINT

> 201 F

Material Safety Data Sheet

Name : **Awesome Orange All Purpose Cleaner & Degreasers**

Date Issued : 9/20/04

FLAMMABLE LIMITS

Not applicable.

AUTOIGNITION TEMPERATURE

Not applicable.

EXTINGUISHING MEDIA

Foam. CO₂. Dry chemical. Water Fog.

SPECIAL FIREFIGHTING PROCEDURES

Normal fire fighting procedures may be used.

UNUSUAL FIRE AND EXPLOSION HAZARDS

Container may melt and leak in heat of fire

SECTION 6 - PREVENTATIVE RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

Dike large spills. Absorb with oil-dri or similar inert material
Sweep or scrape up and containerize

SECTION 7 - HANDLING AND STORAGE

PRECAUTIONARY INFORMATION

May be : Eye irritant. Avoid contact with eyes. If such contact occurs, flush immediately with plenty of water for at least 15 to 20 minutes.
If irritation persists, seek medical aid. Keep out of reach of children.

SECTION 8 - SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION

No special requirements under normal use conditions.

VENTILATION

No special requirements.

PROTECTIVE GLOVES

No special requirements under normal use conditions.

Material Safety Data Sheet

Name : Awesome Orange All Purpose Cleaner & Degreasers

Date Issued : 9/20/04

EYE PROTECTION

No special requirements under normal use conditions.

OTHER PROTECTIVE MEASURES

No special requirements.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

COLOR

Varies

PRODUCT STATE

Liquid

ODOR

Orange

pH Range

12 - 13

ODOR THRESHOLD

Not available.

SOLUBILITY IN WATER

Complete

SPECIFIC GRAVITY (H₂O = 1)

1.00

VAPOR DENSITY (AIR = 1)

Not Available

EVAPORATION RATE (BUTYL ACETATE = 1)

Not available

VAPOR PRESSURE (mm HG)

Not Available.

BOILING POINT

212 °F (100 °C)

Material Safety Data Sheet

Name : **Awesome Orange All Purpose Cleaner & Degreasers**

Date Issued : 9/20/04

FREEZING POINT

- 32 °F (0 °C)

COEFFICIENT OF WATER / OIL

Not available.

SECTION 10 - STABILITY AND REACTIVITY

STABILITY

Stable

STABILITY - CONDITIONS TO AVOID

Not applicable

INCOMPATIBILITY

None known.

HAZARDOUS POLYMERIZATION

Will not occur.

HAZARDOUS POLYMERIZATION - CONDITIONS TO AVOID

Not applicable

SECTION 11 - TOXICOLOGY INFORMATION (Also see Section 3)

LD50 (ACUTE ORAL TOX)

Not available.

LD 50 (ACUTE DERMAL TOX)

Not available.

LD50 (ACUTE INHALATION TOX)

Not available.

EFFECTS OF CHRONIC EXPOSURE

None known.

CARCINOGENICITY

None known.

Material Safety Data Sheet

Name : Awesome Orange All Purpose Cleaner & Degreasers

Date Issued : 9/20/04

REPRODUCTIVE TOXICITY

None known.

TERATOGENICITY

None known.

MUTAGENICITY

None known.

SECTION 12 - ECOLOGICAL INFORMATION

ENVIRONMENTAL DATA

Contains readily degradable surfactants.

SECTION 13 - DISPOSAL CONSIDERATIONS

WASTE DISPOSAL INFORMATION

Waste from normal product use may be sewerred to a publicly-owned treatment wor.
(POTW) in compliance with applicable Federal / Provincial / State / Local /
Municipal pretreatment requirements.

SECTION 14 - TRANSPORTATION INFORMATION

US DOT INFORMATION

Not applicable.

CANADIAN SHIPPING NAME

TDG CLASSIFICATION

Non-regulated.

PIN/NIP

Not applicable

Material Safety Data Sheet

Name : **Awesome Orange All Purpose Cleaner & Degreasers**

Date Issued : 9/20/04

PACKING GROUP

Not applicable.

EXEMPTION NAME

Not applicable.

SECTION 15 -REGULATORY INFORMATION

WHIMS CLASSIFICATION

Not applicable

All ingredients of this product are listed or are excluded from listing on the U.S. Toxic Substances control Act (TSCA) Chemical Substance Inventory.

All ingredients in this product comply with the New Substances Notification requirements under the Canadian Environmental Protection Act (CEPA).

This product is not subject to the reporting requirements under the California Proposition 65.

SECTION 16 - OTHER INFORMATION

ADDITIONAL INFORMATION

Use as directed.

EPA REGISTRATION #

Not applicable.

PREPARATION INFORMATION -

PREPARED BY

Manufacturer's Technical Support Department. Refer to page 1 (Manufacturer) for contact information.

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