



## SAFETY DATA SHEET

### WCS 2087 Corrosion/Scale Inhibitor (w)

## Section 1. Identification

**GHS product identifier** : WCS 2087 Corrosion/Scale Inhibitor (w)

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

**Product use** : Corrosion/Scale Inhibitor

**Product type** : Liquid.

**Manufacturer** : Jacam Manufacturing 2013, L.L.C.  
P.O.Box 208, 1656 Ave. Q.  
Sterling, Kansas 67579

**Validation date** : 8/2/2018

**For Chemical Emergency  
Spill, Leak Fire, Exposure or  
Accident:** : **Call CHEMTREC Day or Night  
Within USA and Canada 800-424-9300  
Or +1 703-527-3887 (Collect calls accepted)**

**Direct all other calls to:  
Jacam Chemicals 2013, L.L.C. 620-278-3355  
Mon – Fri 8 a.m. to 5 p.m. (Closed on major holidays)**

**Supplier's details** : Jacam Chemicals 2013, L.L.C.  
P.O. Box 96, 205 S. Broadway  
Sterling, Kansas 67579

## Section 2. Hazards identification

**Classification of the substance or mixture** : SKIN IRRITATION - Category 2  
SERIOUS EYE DAMAGE - Category 1  
SKIN SENSITIZATION - Category 1  
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (kidneys) - Category 2

### GHS label elements


*Date of issue/Date of revision*

8/2/2018

People + Products ⇌ Performance™

*Version* : 1.04

## Section 2. Hazards identification

<b>Hazard pictograms</b>	: 
<b>Signal word</b>	: Danger
<b>Hazard statements</b>	: H318 - Causes serious eye damage. H315 - Causes skin irritation. H317 - May cause an allergic skin reaction. H371 - May cause damage to organs. (kidneys)
<b><u>Precautionary statements</u></b>	
<b>General</b>	: P103 - Read label before use. P102 - Keep out of reach of children. P101 - If medical advice is needed, have product container or label at hand.
<b>Prevention</b>	: P280 - Wear protective gloves. Wear eye or face protection. P260 - Do not breathe vapor. P270 - P270 - Do not eat, drink or smoke when using this product. P264 - Wash hands thoroughly after handling. P272 - Contaminated work clothing should not be allowed out of the workplace.
<b>Response</b>	: P308 + P311 - P308 + P313 - IF exposed or concerned: Get medical advice/attention Call a POISON CENTER or physician. P302 + P352 + P363 - IF ON SKIN: Wash with plenty of soap and water. Wash contaminated clothing before reuse. P333 + P313 - If skin irritation or rash occurs: Obtain medical attention. P305 + P351 + P338 + P310 - 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 CENTER or physician.
<b>Storage</b>	: P405 - Store locked up.
<b>Disposal</b>	: P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
<b>Hazards not otherwise classified</b>	: None known.
<b>Routes of entry</b>	: Dermal contact. Eye contact. Inhalation. Ingestion. INGESTION: Although not a normal route of entry, ingestion is expected to be harmful. DO NOT TAKE INTERNALLY. FOR INDUSTRIAL USE ONLY.
<b>Target organs</b>	: Contains material which may cause damage to the following organs: kidneys, the nervous system, heart, upper respiratory tract, skin, central nervous system (CNS), eye, lens or cornea.

## Section 3. Composition/information on ingredients

<b>Substance/mixture</b>	: Mixture
<b>Other means of identification</b>	: Not available.
<b><u>CAS number/other identifiers</u></b>	
<b>CAS number</b>	: Not applicable.

## Section 3. Composition/information on ingredients

Ingredient name	%	CAS number
Glycerol	30 - 60	56-81-5
Proprietary	1 - 5	Proprietary
Ethylene Glycol	1 - 5	107-21-1
(2-hydroxyethyl)ammonium mercaptoacetate	1 - 5	126-97-6
Proprietary	1 - 5	Proprietary
Proprietary	1 - 5	Proprietary

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

### Description of necessary first aid measures

- Eye contact** : If irritation persists, obtain medical attention. Call a poison center or physician. 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 15 minutes. Chemical burns must be treated promptly by a physician.
- Inhalation** : If irritation persists, obtain medical attention. Call a poison center or physician. 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. 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** : If irritation persists, obtain medical attention. Call a poison center or physician. 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 15 minutes. Chemical burns must be treated promptly by a physician. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : If irritation persists, obtain medical attention. 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. 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. Chemical burns must be treated promptly by a 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

## Section 4. First aid measures

- Eye contact** : Causes serious eye damage.
- Inhalation** : No known significant effects or critical hazards.
- 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  
watering  
redness
- Inhalation** :  No specific data.
- Skin contact** :  Adverse symptoms may include the following:  
pain or irritation  
redness
- Ingestion** :  Adverse symptoms may include the following:  
stomach pains

<u>Specific target organ toxicity (single exposure)</u>			
Name	Category	Route of exposure	Target organs
Ethylene Glycol	Category 2	Oral	kidneys

<u>Specific target organ toxicity (repeated exposure)</u>
<input checked="" type="checkbox"/> Not available.

<u>Aspiration hazard</u>	
Name	Result
Not available.	

### 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.

## Section 5. Fire-fighting measures

**Additional Vapor Statement** : Not available.  
Not available.

**Hazardous thermal decomposition products** :  Decomposition products may include the following materials:  
carbon dioxide  
carbon monoxide  
nitrogen oxides  
sulfur oxides  
phosphorus oxides  
halogenated compounds

**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 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. 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
glycerol	<p><b>OSHA PEL 1989 (United States, 3/1989).</b>                      TWA: 5 mg/m<sup>3</sup> 8 hours. Form: Respirable fraction                      TWA: 10 mg/m<sup>3</sup> 8 hours. Form: Total dust</p> <p><b>OSHA PEL (United States, 2/2013).</b>                      TWA: 5 mg/m<sup>3</sup> 8 hours. Form: Respirable fraction                      TWA: 15 mg/m<sup>3</sup> 8 hours. Form: Total dust</p>
Ethylene Glycol	<p><b>ACGIH TLV (United States, 4/2014).</b>                      C: 100 mg/m<sup>3</sup> Form: Aerosol</p> <p><b>OSHA PEL 1989 (United States, 3/1989).</b>                      CEIL: 50 ppm                      CEIL: 125 mg/m<sup>3</sup></p>
Proprietary	<p><b>ACGIH TLV (United States, 4/2014).</b>                      TWA: 10 mg/m<sup>3</sup> 8 hours. Form: Fume                      STEL: 20 mg/m<sup>3</sup> 15 minutes. Form: Fume</p> <p><b>NIOSH REL (United States, 10/2013).</b>                      TWA: 10 mg/m<sup>3</sup> 10 hours. Form: Fume                      STEL: 20 mg/m<sup>3</sup> 15 minutes. Form: Fume</p> <p><b>OSHA PEL 1989 (United States, 3/1989).</b>                      TWA: 10 mg/m<sup>3</sup> 8 hours.                      STEL: 20 mg/m<sup>3</sup> 15 minutes.</p>

- 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.

## Section 8. Exposure controls/personal protection

**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.

**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 and/or face shield. If inhalation hazards exist, a full-face respirator may be required instead.

### 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.

**Personal protective equipment (Pictograms)** :



## Section 9. Physical and chemical properties

### Appearance

**Physical state** : Liquid.

**Color** : Pale straw colored

**Odor** : Pungent.

**Odor threshold** : Not available.

**pH** : 5 to 7

**Melting point** : -40°C (-40°F)

**Boiling point** : Not available.

**Flash point** : Closed cup: >93.333°C (>200°F) [Pensky-Martens.]



## Section 9. Physical and chemical properties

<b>Evaporation rate</b>	: Not available.
<b>Flammability (solid, gas)</b>	: Not available.
<b>Lower and upper explosive (flammable) limits</b>	: Not available.
<b>Vapor pressure</b>	: Not available.
<b>Vapor density</b>	: >1 [Air = 1]
<b>Relative density</b>	: 1.13 to 1.19
<b>Density</b>	: 9.43 to 9.93 (lbs/gal)
<b>Solubility</b>	: Easily soluble in the following materials: cold water and hot water.
<b>Partition coefficient: n-octanol/water</b>	: Not available.
<b>Auto-ignition temperature</b>	: Not available.
<b>Decomposition temperature</b>	: Not available.
<b>Viscosity</b>	: Not available.

## Section 10. Stability and reactivity

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

## Section 11. Toxicological information

### Information on toxicological effects

#### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
glycerol	LD50 Oral	Rat	12600 mg/kg	-
Ethylene Glycol	LD50 Oral	Rat	4700 mg/kg	-
(2-hydroxyethyl)ammonium mercaptoacetate	LD50 Oral	Rat	250 mg/kg	-
Proprietary	LD50 Oral	Rat	1650 mg/kg	-
Proprietary	LD50 Oral	Rat	970 mg/kg	-



## Section 11. Toxicological information

### Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
glycerol	Eyes - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
Proprietary	Skin - Irritant	Rabbit	-	24 hours	3 days
	Eyes - Cornea opacity	Rabbit	>1	-	-
Ethylene Glycol	Eyes - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
	Eyes - Mild irritant	Rabbit	-	1 hours 100 milligrams	-
	Eyes - Moderate irritant	Rabbit	-	6 hours 1440 milligrams	-
	Skin - Mild irritant	Rabbit	-	555 milligrams	-
(2-hydroxyethyl)ammonium mercaptoacetate	Skin - Irritant	Rabbit	-	24 hours	3 days
	Eyes - Cornea opacity	Rabbit	4	-	-
Proprietary	Eyes - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
	Eyes - Severe irritant	Rabbit	-	100 milligrams	-
Proprietary	Skin - Severe irritant	Rabbit	-	4 hours	14 days
	Skin - Visible necrosis	Rabbit	-	1 hours	12 days
	Eyes - Cornea opacity	Rabbit	4	-	-

### Sensitization

Product/ingredient name	Route of exposure	Species	Result
(2-hydroxyethyl)ammonium mercaptoacetate	skin	Rabbit	Sensitizing

### Mutagenicity

Product/ingredient name	Test	Experiment	Result
Not available.			

### Carcinogenicity

Product/ingredient name	Result	Species	Dose	Exposure
Not available.				

### Product/ingredient name

Not available.

### Reproductive toxicity

Product/ingredient name	Maternal toxicity	Fertility	Development toxin	Species	Dose	Exposure
Not available.						

## Section 11. Toxicological information

<u>Teratogenicity</u>				
Product/ingredient name	Result	Species	Dose	Exposure
Not available.				
<u>Specific target organ toxicity (single exposure)</u>				
Name	Category	Route of exposure	Target organs	
Ethylene Glycol	Category 2	Oral	kidneys	
<u>Specific target organ toxicity (repeated exposure)</u>				
<input checked="" type="checkbox"/> Not available.				
<u>Aspiration hazard</u>				
Name	Result			
Not available.				

**Information on the likely ToxKinetics - routes of exposure** : Routes of entry anticipated: Oral, Dermal, Inhalation.

### Potential acute health effects

- Eye contact** : Causes serious eye damage.
- Inhalation** : No known significant effects or critical hazards.
- 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  
watering  
redness
- Inhalation** :  No specific data.
- Skin contact** :  Adverse symptoms may include the following:  
pain or irritation  
redness
- Ingestion** :  Adverse symptoms may include the following:  
stomach pains

### 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

## Section 11. Toxicological information

Not available.

<b>General</b>	: <input checked="" type="checkbox"/> Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.
<b>Carcinogenicity</b>	: No known significant effects or critical hazards.
<b>Mutagenicity</b>	: No known significant effects or critical hazards.
<b>Teratogenicity</b>	: <input checked="" type="checkbox"/> No known significant effects or critical hazards.
<b>Developmental effects</b>	: No known significant effects or critical hazards.
<b>Fertility effects</b>	: No known significant effects or critical hazards.

### Numerical measures of toxicity

#### Acute toxicity estimates

Route	ATE value
<input checked="" type="checkbox"/> Oral	7130.3 mg/kg

## Section 12. Ecological information

### Toxicity

Product/ingredient name	Result	Species	Exposure
<input checked="" type="checkbox"/> Ethylene Glycol	Acute LC50 100000 µg/l Marine water	Crustaceans - Crangon crangon - Adult	48 hours
	Acute LC50 10000000 µg/l Fresh water	Daphnia - Daphnia magna	48 hours
	Acute LC50 8050000 µg/l Fresh water	Fish - Pimephales promelas	96 hours
Proprietary	Acute EC50 0.07 mg/l Marine water	Algae - Hormosira banksii - Gamete	72 hours
	Acute LC50 20 µg/l Fresh water	Crustaceans - Macrobrachium rosenbergii - Post-larvae	48 hours
	Acute LC50 390 µg/l Fresh water	Daphnia - Daphnia magna - Young	48 hours
	Acute LC50 80 µg/l Fresh water	Fish - Oncorhynchus mykiss	96 hours
	Chronic NOEC 0.6 mg/l Marine water	Algae - Entomoneis punctulata - Exponential growth phase	72 hours
	Chronic NOEC 330 µg/l Fresh water	Crustaceans - Crangonyx sp. - Juvenile (Fledgling, Hatchling, Weanling)	21 days
	Chronic NOEC 19.66 mg/l Fresh water	Daphnia - Daphnia magna	21 days
	Chronic NOEC 0.006 mg/l Fresh water	Fish - Ictalurus punctatus - Fry	30 days

**Conclusion/Summary** : Not available.

### Persistence and degradability

Not available.

### Product/ingredient name

Not available.

### Product/ingredient name

## Section 12. Ecological information

Not available.

<u>Bioaccumulative potential</u>			
Product/ingredient name	LogP <sub>ow</sub>	BCF	Potential
glycerol	-1.76	-	low
Ethylene Glycol	-1.36	-	low
Proprietary	-3.2	-	low

### Mobility in soil

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

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

## Section 13. Disposal considerations

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

Regulatory information	UN/NA Number	Proper shipping name	Hazard Class(es)	PG*
DOT Classification			PG* : Packing group	
	Not regulated.		-	-

Additional information



Label

**TDG Classification**

## Section 14. Transport information

 Not regulated. 

 - -

### Additional information

-

### Label

### IMDG Class

 Not regulated. 

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**Marine pollutant notes:** : Not available.

### Additional information

-

### Label

### IATA-DGR Class

 Not regulated. 

 - -

### Additional information

-

### Label

## Section 15. Regulatory information

**U.S. Federal regulations** : **TSCA 4(a) proposed test rules:** Quaternary ammonium compounds, (oxydi-2,1-ethane bis[coco alkyldimethyl, dichlorides  
**TSCA 8(a) CDR Exempt/Partial exemption:** Not determined  
 Not determined.  
 **Clean Water Act (CWA) 311:** Proprietary

**Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs)** : Listed

**Clean Air Act Section 602 Class I Substances** : Not listed

**Clean Air Act Section 602 Class II Substances** : Not listed

**DEA List I Chemicals (Precursor Chemicals)** : Not listed

**DEA List II Chemicals (Essential Chemicals)** : Not listed

### SARA 302/304

## Section 15. Regulatory information

### Composition/information on ingredients

No products were found.

**SARA 304 RQ** : Not applicable.

### **SARA 311/312**

**Classification** : Immediate (acute) health hazard

### Composition/information on ingredients

Name	%	Fire hazard	Sudden release of pressure	Reactive	Immediate (acute) health hazard	Delayed (chronic) health hazard
glycerol	30 - 60	No.	No.	No.	Yes.	No.
Proprietary	1 - 5	No.	No.	No.	Yes.	No.
Ethylene Glycol	1 - 5	No.	No.	No.	Yes.	No.
(2-hydroxyethyl)ammonium mercaptoacetate	1 - 5	No.	No.	Yes.	Yes.	No.
Proprietary	1 - 5	No.	No.	No.	Yes.	No.
Proprietary	1 - 5	No.	No.	No.	Yes.	No.

### **SARA 313**

	Product name	CAS number	%
<b>Form R - Reporting requirements</b>	Ethylene Glycol	107-21-1	1 - 5
	Proprietary	Proprietary	1 - 5
<b>Supplier notification</b>	Ethylene Glycol	107-21-1	1 - 5
	Proprietary	Proprietary	1 - 5

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.

### State regulations

**Massachusetts** : The following components are listed: GLYCERINE MIST; ETHYLENE GLYCOL; Proprietary

**New York** : The following components are listed: Ethylene glycol; Proprietary

**New Jersey** : The following components are listed: GLYCERIN; 1,2,3-PROPANETRIOL; ETHYLENE GLYCOL; 1,2-ETHANEDIOL; Proprietary

**Pennsylvania** : The following components are listed: 1,2,3-PROPANETRIOL; 1,2-ETHANEDIOL; Proprietary

### California Prop. 65

**WARNING:** This product contains less than 1% of a chemical known to the State of California to cause birth defects or other reproductive harm.

Ingredient name	Cancer	Reproductive	No significant risk level	Maximum acceptable dosage level
methanol	No.	Yes.	No.	23000 µg/day (ingestion) 47000 µg/day (inhalation)

### International regulations

#### Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

#### Montreal Protocol (Annexes A, B, C, E)

## Section 15. Regulatory information

Not listed.

### [Stockholm Convention on Persistent Organic Pollutants](#)

Not listed.

### [Rotterdam Convention on Prior Informed Consent \(PIC\)](#)

Not listed.

### [UNECE Aarhus Protocol on POPs and Heavy Metals](#)

Not listed.

### [Canadian lists](#)

**Canadian NPRI (Pollution Release)** : The following components are listed: Ethylene glycol; Ammonia (total)

**CEPA Toxic substances** : None of the components are listed.

**Canada inventory-DSL / NDSL** : Not determined.

### [International lists](#)

#### [National inventory](#)

**Australia** : Not determined.

**Canada** : Not determined.

**China** : Not determined.

**Europe** : Not determined.

**Japan** : **Japan inventory (ENCS)**: Not determined.

**Japan inventory (ISHL)**: Not determined.

**Malaysia** : Not determined.

**New Zealand** : Not determined.

**Philippines** : Not determined.

**Republic of Korea** : Not determined.

**Taiwan** : Not determined.

## Section 16. Other information

### [National Fire Protection Association \(U.S.A.\)](#)



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Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.



## Section 16. Other information

**Normal Package Size(s):** Ball: 2" Ball 50/Cooler; 4" Ball 12/Cooler  
 Dry Product: 50 Lbs/Box  
 Liquid: 5 Gallon/55 Gallon/Bulk  
 Pellets: 30 Lbs/Cooler; 24 Lbs/Pail  
 Stix: 1 1/4": 50 Each/Cooler

### 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

**References** : Not available.

✔ Indicates information that has changed from previously issued version.

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\*\*\* END OF SDS \*\*\*