

## SAFETY DATA SHEET

Preparation Date: 07/25/2019

Revision date 07/25/2019

Revision Number: G1

### 1. IDENTIFICATION

#### Product identifier

**Product code:** M1127  
**Product Name:** 2-MERCAPTOETHANOL, REAGENT

#### Other means of identification

**Synonyms:** Emery 5791  
 2-Hydroxy-1-ethanethiol  
 2-Hydroxyethyl mercaptan  
 2-ME  
 Mercaptoethanol  
 beta-Mercaptoethanol  
 Monothioethyleneglycol  
 1-Ethanol-2-thiol  
 Ethylene glycol, monothio-  
 2-Thioethanol  
 Thiomonoglycol  
 Thioethylene glycol

**CAS #:** 60-24-2  
**RTECS #** KL5600000  
**CI#:** Not available

#### Recommended use of the chemical and restrictions on use

**Recommended use:** Reducing agent. Protein denaturation. Research and Development. Laboratory chemicals.

**Uses advised against** No information available

**Supplier:** Spectrum Chemical Mfg. Corp  
 14422 South San Pedro St.  
 Gardena, CA 90248  
 (310) 516-8000

**Order Online At:** <https://www.spectrumchemical.com>

**Emergency telephone number** Chemtrec 1-800-424-9300

**Contact Person:** Tom Tyner (USA - West Coast)

**Contact Person:** Ibad Tirmiz (USA - East Coast)

### 2. HAZARDS IDENTIFICATION

#### Classification

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

Considered a dangerous substance or mixture according to the Globally Harmonized System (GHS)


Acute toxicity - Oral	Category 3
Acute toxicity - Dermal	Category 2
Acute toxicity - Inhalation (Gases)	Category 3

Acute toxicity - Inhalation (Vapors)	Category 3
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 1
Skin sensitization	Category 1
Specific target organ toxicity (repeated exposure)	Category 2
Flammable liquids	Category 4

### Label elements

**Danger**

**Hazard statements**  
 Toxic if swallowed or if inhaled  
 Fatal in contact with skin  
 Causes skin irritation  
 Causes serious eye damage  
 May cause an allergic skin reaction  
 May cause damage to organs through prolonged or repeated exposure  
 Combustible liquid



### Hazards not otherwise classified (HNOC)

Not Applicable

### Other hazards

Not available

### **Precautionary Statements - Prevention**

Wash face, hands and any exposed skin thoroughly after handling  
 Do not eat, drink or smoke when using this product  
 Do not get in eyes, on skin, or on clothing  
 Wear protective gloves/protective clothing/eye protection/face protection  
 Use only outdoors or in a well-ventilated area  
 Contaminated work clothing must not be allowed out of the workplace  
 Do not breathe mist or vapors  
 Keep away from heat/sparks/open flames/hot surfaces. — No smoking  
 Keep cool

### **Precautionary Statements - Response**

*Get medical attention if you feel unwell*  
 In case of fire: Use CO<sub>2</sub>, dry chemical, or foam to extinguish.  
 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.  
 IF ON SKIN: Gently wash with plenty of soap and water  
 Immediately call a POISON CENTER or physician  
 Take off immediately all contaminated clothing  
 Wash contaminated clothing before reuse

If skin irritation or rash occurs: Get medical attention

IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor/physician.

IF SWALLOWED: Immediately call a POISON CENTER or physician

Rinse mouth

#### Precautionary Statements - Storage

Store locked up

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

#### Precautionary Statements - Disposal

Dispose of contents and container to an approved waste disposal plant in accordance with local, regional, national and international regulations as applicable

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS No	Weight-%
2-Mercaptoethanol	60-24-2	100

### 4. FIRST AID MEASURES

#### First aid measures

##### General Advice:

National Capital Poison Center in the United States can provide assistance if you have a poison emergency and need to talk to a poison specialist. Call 1-800-222-1222. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves. First aider needs to protect himself.

##### Skin Contact:

Toxic in contact with skin. Wash off immediately with soap and plenty of water. Continue flushing with plenty of water for at least 15 minutes. Remove all contaminated clothes and shoes. Immediate medical attention is required. Call a physician or poison control center immediately.

##### Eye Contact:

Flush eyes with water for 15 minutes. Immediate medical attention is required. Call a physician immediately.

##### Inhalation:

Toxic by inhalation. Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. WARNING! It may be hazardous to the person providing aid to give mouth-to-mouth resuscitation when the inhaled or ingested material is toxic, infectious or corrosive. Do not use mouth-to-mouth resuscitation if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Immediate medical attention is required.

##### Ingestion:

Toxic if swallowed. Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Immediate medical attention is required. Call a physician or Poison Control Center immediately.

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

##### Symptoms

Fatal if absorbed through skin  
Causes serious eye damage  
Causes skin irritation  
May cause an allergic skin reaction  
May cause damage to organs through prolonged or repeated exposure  
Eye contact may result in redness or pain  
May cause corneal injury  
Irritating to mucous membranes  
Irritating to respiratory system  
May cause coughing and shortness of breath  
Sore throat

May cause abdominal pain, nausea, vomiting, diarrhea  
May affect behavior/central nervous system  
Headache  
Dizziness  
Excitement  
Tremors  
Convulsions  
Somnolence  
May affect respiration  
Respiratory depression  
May cause pulmonary edema  
It may affect the kidneys  
It may affect the urinary system  
It may affect metabolism  
May cause anorexia  
Weight loss/gain  
It may affect the heart  
May affect the liver (hepatotoxin)

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

**Notes to Physician:** Treat symptomatically.

**Protection of first-aiders**

First-Aid Providers: Avoid exposure to blood or body fluids. Wear gloves and other necessary protective clothing. Dispose of contaminated clothing and equipment as bio-hazardous waste.

**5. FIRE-FIGHTING MEASURES**

**Extinguishing Media**

**Suitable Extinguishing Media:**

Dry chemical. Water spray. Alcohol-resistant foam. Carbon dioxide (CO<sub>2</sub>).

**Unsuitable Extinguishing Media:**

Do not use a solid (straight) water stream as it may scatter and spread fire.

**Specific hazards arising from the chemical**

**Hazardous combustion products**

Carbon monoxide. Carbon dioxide (CO<sub>2</sub>). Sulfur oxides.

**Specific hazards**

Combustible material. May be ignited by heat, sparks or flames. Vapors may form explosive mixtures with air. Most vapors are heavier than air. They will spread along the ground and collect in low or confined areas (sewers, basements, tanks). Container explosion may occur under fire conditions or when heated. Fire may produce irritating and/or toxic gases.

**Special Protective Actions for Firefighters**

**Specific Methods:**

Water mist may be used to cool closed containers For larger fires, use water spray or fog. Cool containers with flooding quantities of water until well after fire is out

**Special Protective Equipment for Firefighters:**

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

## 6. ACCIDENTAL RELEASE MEASURES

### Personal precautions, protective equipment and emergency procedures

**Personal Precautions:** Avoid contact with skin, eyes and clothing. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Keep people away from and upwind of spill/leak. Wear personal protective equipment. Remove all sources of ignition. All equipment used when handling the product must be grounded. Take precautionary measures against static discharges. Use spark-proof tools and explosion-proof equipment. Pay attention to flashback. In case of large spill, water spray or vapor suppressing foam may be used to reduce vapors, but may not prevent ignition in closed spaces.

**Environmental precautions** Prevent further leakage or spillage if safe to do so. Prevent from entering into soil, ditches, sewers, waterways, and/or ground water. Prevent product from entering drains. Do not let this chemical enter the environment.

### Methods and material for containment and cleaning up

**Methods for containment** Stop leak if you can do it without risk. In case of large spill, dike if needed. Dike far ahead of liquid spill for later disposal.

**Methods for cleaning up** Absorb spill with inert material (e.g. vermiculite, dry sand or earth). Use clean non-sparking tools to collect absorbed material. Use appropriate tools to put the spilled material in a suitable chemical waste disposal container. Clean contaminated surface thoroughly.

## 7. HANDLING AND STORAGE

### Precautions for safe handling

**Technical Measures/Precautions:**

Provide sufficient air exchange and/or exhaust in work rooms. Keep away from incompatible materials. Keep away from open flames, hot surfaces and sources of ignition. To avoid ignition of vapors by static electricity discharge, all metal parts of the equipment must be grounded.

**Safe Handling Advice:**

Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Do not breathe vapors or spray mist. Do not ingest. When using do not smoke. Use only in well-ventilated areas. Keep away from heat and sources of ignition. Handle in accordance with good industrial hygiene and safety practice.

### Conditions for safe storage, including any incompatibilities

**Technical Measures/Storage Conditions:**

Keep container tightly closed in a dry and well-ventilated place. Store at room temperature in the original container. Store away from incompatible materials. Store in a segregated and approved area.

**Incompatible Materials:**

Oxidizing agents  
calcium hypochlorite  
aliphatic amines  
isocyanates  
Metals  
Alkalis  
Acids

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

## National occupational exposure limits

### United States

Component	CAS No	OSHA	NIOSH	ACGIH	AIHA WEEL
2-Mercaptoethanol	60-24-2	None	None	None	0.2 ppm TWA

### Canada

Component	CAS No	Canada - Alberta	Canada - British Columbia	Canada - Ontario	Canada - Quebec
2-Mercaptoethanol	60-24-2	None	None	None	None

### Australia and Mexico

Component	CAS No	Australia	Mexico
2-Mercaptoethanol	60-24-2	None	None

## Appropriate engineering controls

### Engineering measures to reduce exposure:

Ensure adequate ventilation, especially in confined areas. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors and mist below their respective threshold limit value.

## Individual protection measures, such as personal protective equipment

### Personal Protective Equipment

- Eye protection:** Goggles or Safety glasses with side-shields.
- Skin and body protection:** Chemical resistant protective suit  
Boots  
Gloves
- Respiratory protection:** Vapor respirator. Be sure to use an approved/certified respirator or equivalent.
- Hygiene measures:** Avoid contact with skin, eyes and clothing. When using, do not eat, drink or smoke. Wash hands and face before breaks and immediately after handling the product

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical state:</b> Liquid	<b>Appearance:</b> Clear.	<b>Color:</b> Colorless to pale yellow.
<b>Odor:</b> Rotten-egg like. Slight. Characteristic. Unpleasant.	<b>Taste</b> No information available.	<b>Formula</b> C <sub>2</sub> H <sub>6</sub> OS
<b>Molecular/Formula weight (g/mole):</b> 78.13	<b>Flammability (solid, gas)</b> no data available	<b>Flashpoint (°C/°F):</b> 74°C/165°F 68°C/154°F
<b>Flash Point Tested according to:</b> Closed cup Open cup	<b>Autoignition Temperature (°C/°F):</b> 295°C/563°F	<b>Lower Explosion Limit (%):</b> 2.3%
<b>Upper Explosion Limit (%):</b>		

18%

**Melting point/range(°C/°F):**  
No information available

**Decomposition temperature(°C/°F):**  
157-158°C/314-316°F

**Boiling point/range(°C/°F):**  
155-160°C/311-320°F

**Bulk density:**  
No information available

**Density (g/cm3):**  
1.12

**Specific gravity:**  
No information available

**pH**  
4.5-6.0 (50%)

**Vapor pressure @ 20°C (kPa):**  
No information available

**Evaporation rate:**  
No information available

**Vapor density:**  
2.69

**VOC content (g/L):**  
No information available

**Odor threshold (ppm):**  
0.12 (low)  
0.64 (high)

**Partition coefficient  
(n-octanol/water):**  
log Kow -0.056

**Viscosity:**  
No information available

**Miscibility:**  
Miscible with water  
Miscible with Ether  
Miscible with alcohol  
Miscible with Benzene  
Miscible with many organic solvents

**Solubility:**  
Easily soluble in cold water  
Soluble in Ether  
Soluble in most organic solvents

## 10. STABILITY AND REACTIVITY

### Reactivity

Reactive with oxidizing agents

### Chemical stability

**Stability:** Stable under recommended storage conditions.

**Possibility of Hazardous Reactions:** Hazardous polymerization does not occur  
In use, may form flammable/explosive vapor-air mixture

**Conditions to avoid:** Heat, flames and sparks. Ignition sources. Incompatible materials.

**Incompatible Materials:**  
Oxidizing agents  
calcium hypochlorite  
aliphatic amines  
isocyanates  
Metals  
Alkalis  
Acids

**Hazardous decomposition products:** Carbon oxides. Sulfur oxides.

### Other Information

**Corrosivity:** No information available

**Special Remarks on Corrosivity:** No information available

## 11. TOXICOLOGICAL INFORMATION

### Information on likely routes of exposure

**Principal Routes of Exposure:**  
Skin. Ingestion. Inhalation. Eyes.

### Acute Toxicity

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

ATEmix (oral) 244 mg/kg

### **Component Information**

2-Mercaptoethanol	
CAS No	60-24-2

**LD50/oral/rat** = 244 mg/kg Oral LD50 Rat  
**LD50/oral/mouse** = 190 mg/kg LD50 oral mouse  
**LD50/dermal/rabbit** = 150 uL/kg [168 mg/kg] dermal LD50 rabbit  
112 - 224 mg/kg Dermal LD50 Rabbit  
**LD50/dermal/rat** = No information available  
**LC50/inhalation/rat** = 2.0 mg/L inhalation (vapor) LC50 rat  
625 ppm inhalation LC50 rat  
**LC50/inhalation/mouse** = 13.2 mg/m<sup>3</sup> LC50 inhalation mouse  
**Other LD50 or LC50 information** = 300 uL/kg dermal LD50 guinea pig

### **Product Information**

**LD50/oral/rat** =  
**Value - Acute Toxicity** = 244 mg/kg

**LD50/oral/mouse** =  
**Value - Acute Tox** = 190 mg/kg

**LD50/dermal/rabbit**  
**Value - Acute Toxicity** = 112-224 mg/kg

**LD50/dermal/rat**  
**VALUE - Acute Tox** = No information available

**LC50/inhalation/rat**  
**VALUE-Vapor** = 2.0 mg/L  
**VALUE-Gas** = No information available  
**VALUE-Dust/Mist** = No information available

**LC50/Inhalation/mouse**  
**VALUE-Vapor** = 13.2 mg/m<sup>3</sup>  
**VALUE - Gas** = No information available  
**VALUE - Dust/Mist** = No information available

### Symptoms

**Skin Contact:** Fatal if absorbed through skin. Causes skin irritation. Can be absorbed through the skin and cause systemic effects. If absorbed through skin it may cause systemic effects with symptoms similar to those of ingestion.

**Eye Contact:** Causes serious eye damage. Corrosive to the eyes and may cause severe damage including blindness. May cause corneal injury. Redness and pain.

**Inhalation** Toxic by inhalation. Causes respiratory tract and mucous membrane irritation. Causes respiratory tract (nose, throat, lung) irritation with coughing and shortness of breath. It may cause pulmonary edema. May cause chemical pneumonitis. It



may affect the liver. May cause sore throat. May affect respiration (respiratory depression). It may affect the lungs.

**Ingestion**

Toxic if swallowed. May affect behavior/central nervous system (convulsions, muscle contraction or spasticity, excitement, tremor). May affect behavior/central nervous system (dizziness, headache). May affect behavior/central nervous system (somnolence). Causes gastrointestinal (digestive) tract irritation with nausea, vomiting, and diarrhea. May affect respiration (shortness of breath, respiratory depression, pulmonary edema). May affect urinary system (kidneys). May affect liver. May affect metabolism (weight loss or decreased weight gain).

**Aspiration hazard** No information available.

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

**Chronic Toxicity** Prolonged or repeated exposure by inhalation or ingestion will have effects similar to those of acute inhalation or ingestion. Prolonged or repeated ingestion may affect metabolism (cause anorexia, weight loss). Prolonged or repeated exposure may cause injuries to liver, kidneys, lungs, and heart.

**Sensitization:** No information available.

**Mutagenic Effects:** Experiments with bacteria have shown mutagenic effects

**Carcinogenic effects:** Not considered carcinogenic.

Component	CAS No	IARC	ACGIH - Carcinogens	NTP	OSHA HCS - Carcinogens	Australia - Notifiable Carcinogenic Substances	Australia - Prohibited Carcinogenic Substances
2-Mercaptoethanol	60-24-2	Not listed	Not listed	Not listed	Not listed	Not listed	Not listed

*ACGIH (American Conference of Governmental Industrial Hygienists)*

*IARC (International Agency for Research on Cancer)*

*NTP (National Toxicology Program)*

*OSHA (Occupational Safety and Health Administration of the US Department of Labor)*

**Reproductive toxicity** No data is available

**Reproductive Effects:** No information available

**Developmental Effects:** No information available

**Teratogenic Effects:** No information available

**Specific Target Organ Toxicity**

**STOT - single exposure** No information available.

**STOT - repeated exposure** liver. kidney. Urinary Tract. respiratory system. central nervous system. heart.

**Target Organs:** Liver, kidney, and respiratory system. Urinary Tract.

**12. ECOLOGICAL INFORMATION**

**Ecotoxicity**

**Ecotoxicity effects:** Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

2-Mercaptoethanol - 60-24-2

**Algae/aquatic plants**

**Fish**

EC50: =12mg/L (72h, Desmodesmus subspicatus)

46-100 mg/L LC50 Leuciscus idus 96 h static 1

37 mg/L LC50 Leuciscus idus 96h static

**Crustacea**

EC50: =1.52mg/L (48h, Daphnia magna)

<b>Toxicity to microorganisms</b>	125 mg/L EC50 Pseudomonas putida 17h
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**Persistence and degradability:** Not readily biodegradable

**Bioaccumulative potential:** Potential for bioconcentration in aquatic organisms is low.

**Mobility in soil** No information available

**Other adverse effects** No information available.

### 13. DISPOSAL CONSIDERATIONS

#### Disposal Methods

**Waste from residues / unused products:**

Waste must be disposed of in accordance with Federal, State and Local regulation.

**Contaminated packaging:**

Empty containers should be taken for local recycling, recovery or waste disposal. Do not re-use empty containers  
Dispose of as unused product.

Component	CAS No	RCRA - F Series Wastes	RCRA - K Series Wastes	RCRA - P Series Wastes	RCRA - U Series Wastes
2-Mercaptoethanol	60-24-2	None	None	None	None

### 14. TRANSPORT INFORMATION

**DOT**

**UN-No:** UN2966  
**Proper Shipping Name:** Thioglycol  
**Hazard Class** 6.1  
**Subsidiary Class** No information available  
**Packing group:** II  
**Emergency Response Guide Number** 153  
**Marine Pollutant** No data available  
**DOT RQ (lbs):** No information available  
**Special Provisions** IB2, T7, TP2  
**Symbol(s):** No information available  
**Description:** UN2966, Thioglycol, 6.1, II

**TDG (Canada)**

**UN-No:** UN2966  
**Proper Shipping Name:** Thioglycol  
**Hazard Class** 6.1  
**Subsidiary Risk:** No information available  
**Packing Group:** II  
**Marine Pollutant** No Information available  
**Description:** UN2966, Thioglycol, 6.1, II

**ADR**

**Product code:** M1127

**Product name:**  
2-MERCAPTOETHANOL, REAGENT

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**UN Number** UN2966  
**Proper Shipping Name:** Thioglycol  
**Transport hazard class(es)** 6.1  
**Packing group** II  
**Subsidiary Risk:** No information available  
**Description:** UN2966, Thioglycol, 6.1, II

**IMDG**

**UN-No:** UN2966  
**Proper Shipping Name:** Thioglycol  
**Hazard Class:** 6.1  
**Subsidiary Risk:** No information available  
**Packing Group:** II  
**Marine Pollutant** No information available  
**EMS:** F-A  
**Description** UN2966, Thioglycol, 6.1, II

**RID**

**UN Number** UN2966  
**Proper Shipping Name:** Thioglycol  
**Transport hazard class(es)** 6.1  
**Subsidiary Risk:** No information available  
**Packing group** II  
**Description:** UN2966, Thioglycol, 6.1, II

**ICAO (air)**

**UN-No:** UN2966  
**Proper Shipping Name:** Thioglycol  
**Hazard Class** 6.1  
**Subsidiary Risk:** No information available  
**Packing Group:** II  
**Description:** UN2966, Thioglycol, 6.1, II

**IATA**

**UN Number** UN2966  
**Proper Shipping Name:** Thioglycol  
**Transport hazard class(es)** 6.1  
**Subsidiary Risk:** No information available  
**Packing group** II  
**Precautionary Statements - Response** 6L  
**Special Provisions** No information available  
**Description:** UN2966, Thioglycol, 6.1, II

<b>15. REGULATORY INFORMATION</b>
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**International Inventories**

Component	CAS No	U.S. TSCA	KOREA KECL	Philippines (PICCS)	Japan ENCS	China IECSC	Australia (AICS)	EINECS-No.
2-Mercaptoethanol	60-24-2	PresentACTIV E	Present KE-23095	Present	Present (2)-458	Present	Present	Present 200-464-6

**U.S. Regulations**

2-Mercaptoethanol  
 Massachusetts RTK: Present

New Jersey RTK Hazardous Substance List: 2821

Pennsylvania RTK: Present

Minnesota - Hazardous Substance List: Present

FDA - 21 CFR - Total Food Additives 177.1020, 177.1030, 178.2010

- List Sourced from EAFUS

### California Prop. 65: Safe Drinking Water and Toxic Enforcement Act of 1986.

#### Chemicals Known to the State of California to Cause Cancer:

This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

#### Chemicals Known to the State of California to Cause Reproductive Toxicity:

This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

Component	CAS No	Carcinogen	Developmental Toxicity	Male Reproductive Toxicity	Female Reproductive Toxicity:
2-Mercaptoethanol	60-24-2	Not Listed	Not Listed	Not Listed	Not Listed

### CERCLA/SARA

Component	CAS No	CERCLA - Hazardous Substances and their Reportable Quantities	Section 302 Extremely Hazardous Substances and TPQs	Section 302 Extremely Hazardous Substances and RQs	Section 313 - Chemical Category	Section 313 - Reporting de minimis
2-Mercaptoethanol	60-24-2	None	None	None	None	None

### U.S. TSCA

Component	CAS No	TSCA Section 5(a)2 - Chemicals With Significant New Use Rules (SNURS)	TSCA 8(d) -Health and Safety Reporting
2-Mercaptoethanol	60-24-2	Not Applicable	Not Applicable

### Canada

#### WHMIS 2015 - GHS Classifications

WHMIS 2015 Hazard Classification Information:

Component  
2-Mercaptoethanol  
60-24-2 ( 100 )

WHMIS 2015 Hazard Classification  
Flammable liquids - Category 4: H227 Combustible liquid.; Acute toxicity - Dermal - Category 2: H310 Fatal in contact with skin.; Acute toxicity - Inhalation - Category 3: H331 Toxic if inhaled.; Skin corrosion/irritation - Category 2: H315 Causes skin irritation.; Serious Eye Damage/Eye Irritation - Category 1: H318 Causes serious eye damage.; Skin sensitizers - Category 1: H317 May cause allergic skin reaction.

**Canada Hazardous Products Regulation** This product has been classified according to the hazard criteria of the HPR (Hazardous Products Regulation) and the SDS contains all of the information required by the HPR

### DSL/NDSL

Component	CAS No	Canada (DSL)	Canada (NDSL)
2-Mercaptoethanol	60-24-2	Present	Not Listed

<b>Component</b>	CAS No	CEPA Schedule I - Toxic Substances
2-Mercaptoethanol	60-24-2	Not listed
<b>Component</b>	CAS No	CEPA - 2010 Greenhouse Gases Subject to Mandatory Reporting
2-Mercaptoethanol	60-24-2	Not listed

### EU Classification

#### EU GHS - SV - CLP 1272/2008

Component	CAS No	EU GHS - SV - CLP (1272/2008)
2-Mercaptoethanol	60-24-2	

#### EU - CLP (1272/2008)

#### R-phrase(s)

R27 - Very toxic in contact with skin  
R34 - Causes burns  
R38 - Irritating to skin  
R43 - May cause sensitization by skin contact  
R48 - Danger of serious damage to health by prolonged exposure  
R23/25 - Toxic by inhalation and if swallowed

#### S -phrase(s)

S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice  
S28 - After contact with skin, wash immediately with plenty of water  
S45 - In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible)  
S62 - If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label  
S63 - In case of accident by inhalation: remove casualty to fresh air and keep at rest  
S 1/2 - Keep locked up and out of the reach of children.  
S36/37/39 - Wear suitable protective clothing, gloves and eye/face protection

Component	CAS No	Classification	Concentration Limits:	Safety Phrases
2-Mercaptoethanol	60-24-2		No information	

The product is classified in accordance with Annex VI to Directive 67/548/EEC

#### Indication of danger:

T+ - Very toxic  
T - Toxic  
C - Corrosive  
Xi - Irritant

T+



Xi



### 16. OTHER INFORMATION

Preparation Date: 07/25/2019  
Revision date: 07/25/2019  
Prepared by: Sonia Owen

#### Disclaimer:

All chemicals may pose unknown hazards and should be used with caution. This Safety Data Sheet (SDS) applies only to the material as packaged. If this product

is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this SDS. The physical properties reported in this SDS are obtained from the literature and do not constitute product specifications. Information contained herein does not constitute a warranty, whether expressed or implied, as to the safety, merchantability or fitness of the goods for a particular purpose. Spectrum Chemicals & Laboratory Products, Inc. assumes no responsibility for results obtained or for incidental or consequential damages, including lost profits, arising from the use of these data. No warranty against infringement of any patent, copyright or trademark is made or implied. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this SDS is based on technical data judged to be reliable, Spectrum assumes no responsibility for the completeness or accuracy of the information contained herein.

**End of Safety Data Sheet**