Safety Data Sheet

Cat. # BC98

ß-Mercaptoethanol

Size: 100ml
2-mercaptoethanol
Safety Data Sheet
according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations
Date of issue: 10/09/2015 Revision date: 05/11/2017 Version: 7.1

SECTION 1: Identification

1.1. Identification
Product form : Substance
Substance name : 2-mercaptoethanol
CAS-No. : 60-24-2
Product code : P001_103M
Formula : C2H6OS

BIG No : 10274

1.2. Recommended use and restrictions on use
Use of the substance/mixture : Solvent
Pesticide: intermediate product

1.3. Supplier
Geno Technology, Inc./ G-Biosciences
9800 Page Avenue
Saint Louis, 63132-1429 - United States
T 800-628-7730 - F 314-991-1504
technical@GBiosciences.com - www.GBiosciences.com

1.4. Emergency telephone number
Emergency number : Chemtrec 1-800-424-9300 (USA/Canada), +1-703-527-3887 (Intl)

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS US classification
Flammable liquids Category 4
Acute toxicity (oral) Category 3
Acute toxicity (dermal) Category 3
Acute toxicity (inhalation) Category 3
Acute toxicity (inhalation:dust,mist) Category 4
Skin corrosion/irritation Category 2
Serious eye damage/eye irritation Category 1
Skin sensitization, category 1A
Specific target organ toxicity (repeated exposure) Category 2
Hazardous to the aquatic environment - Acute Hazard Category 1
Hazardous to the aquatic environment - Chronic Hazard Category 1

Full text of H statements : see section 16

2.2. GHS Label elements, including precautionary statements

GHS US labeling
Hazard pictograms (GHS US) : 

Signal word (GHS US) : Danger

Hazard statements (GHS US) : H227 - Combustible liquid
H301+H311+H331 - Toxic if swallowed, in contact with skin or if inhaled
H315 - Causes skin irritation
H317 - May cause an allergic skin reaction
H318 - Causes serious eye damage
H332 - Harmful if inhaled
H373 - May cause damage to organs through prolonged or repeated exposure
H400 - Very toxic to aquatic life
H410 - Very toxic to aquatic life with long lasting effects
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Precautionary statements (GHS US):
H400 - Very toxic to aquatic life
H410 - Very toxic to aquatic life with long lasting effects

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P260 - Do not breathe dust/fume/gas/mist/vapors/spray.
P261 - Avoid breathing dust/fume/gas/mist/vapors/spray.
P264 - Wash hands; forearms and face thoroughly after handling.
P267 - Remove contaminated clothing and wash before reuse.
P270 - Do not eat, drink or smoke when using this product.
P271 - Use only outdoors or in a well-ventilated area.
P272 - Contaminated work clothing must not be allowed out of the workplace.
P273 - Avoid release to the environment.
P280 - Wear protective gloves/protective clothing/eye protection/face protection.
P301 + P310 - If swallowed: Immediately call a poison center or doctor
P302 + P352 - If on skin: Wash with plenty of water
P304 + P340 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P310 - Immediately call a poison center or doctor
P311 - Call a poison center or doctor
P312 - Call a poison center or doctor if you feel unwell
P314 - Get medical advice/attention if you feel unwell.
P321 - Specific treatment (see supplemental first aid instruction on this label)
P322 - Specific treatment (see supplemental first aid instruction on this label)
P330 - Rinse mouth.
P332 + P313 - If skin irritation occurs: Get medical advice/attention.
P333 + P313 - If skin irritation or rash occurs: Get medical advice/attention.
P361 + P364 - Take off immediately all contaminated clothing and wash it before reuse.
P362 + P364 - Take off contaminated clothing and wash it before reuse.
P363 - Wash contaminated clothing before reuse.
P370 + P378 - In case of fire: Use media other than water to extinguish.
P391 - Collect spillage.
P403 + P233 - Store in a well-ventilated place. Keep container tightly closed.
P403 + P235 - Store in a well-ventilated place. Keep cool.
P405 - Store locked up.
P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation

2.3. Other hazards which do not result in classification
No additional information available

2.4. Unknown acute toxicity (GHS US)
Not applicable

SECTION 3: Composition/Information on ingredients

3.1. Substances

Substance type: Mono-constituent

<table>
<thead>
<tr>
<th>Name</th>
<th>Common Name (Synonyms)</th>
<th>Product identifier</th>
<th>%</th>
<th>GHS US classification</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Acute Tox. 3 (Oral), H301</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Acute Tox. 3 (Dermal), H311</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Acute Tox. 3 (Inhalation), H331</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Acute Tox. 4</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(Inhalation: dust,mist), H332</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Skin Irrit. 2, H315</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Eye Dam. 1, H318</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Skin Sens. 1A, H317</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>STOT RE 2, H373</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Aquatic Acute 1, H400</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Aquatic Chronic 1, H410</td>
</tr>
</tbody>
</table>

Full text of hazard classes and H-statements: see section 16

3.2. Mixtures
Not applicable
2-mercaptoethanol  
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**SECTION 4: First-aid measures**

### 4.1. Description of first aid measures

<table>
<thead>
<tr>
<th>First-aid measures general</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>First-aid measures after inhalation</td>
<td>Remove the victim into fresh air. Immediately consult a doctor/medical service.</td>
</tr>
<tr>
<td>First-aid measures after skin contact</td>
<td>Wash immediately with lots of water. Do not apply (chemical) neutralizing agents. Remove clothing before washing. Consult a doctor/medical service.</td>
</tr>
<tr>
<td>First-aid measures after eye contact</td>
<td>Rinse immediately with plenty of water for 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Take victim to an ophthalmologist. Do not apply neutralizing agents.</td>
</tr>
</tbody>
</table>

### 4.2. Most important symptoms and effects (acute and delayed)

- **Potential Adverse human health effects and symptoms**: Odour tolerance may develop. Toxic if swallowed. Fatal in contact with skin. Causes skin irritation. Toxic if inhaled. Causes serious eye damage. Caution! Substance is absorbed through the skin.
- **Symptoms/effects after skin contact**: Red skin. Tingling/irritation of the skin. ON CONTINUOUS EXPOSURE/CONTACT: Caustic burns/corrosion of the skin.
- **Symptoms/effects after eye contact**: Corrosion of the eye tissue. Inflammation/damage of the eye tissue.
- **Symptoms/effects after ingestion**: Irritation of the gastric/intestinal mucosa. Nausea. Abdominal pain.
- **Chronic symptoms**: ON CONTINUOUS/REPEATED EXPOSURE/CONTACT: Skin rash/inflammation.

### 4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

**SECTION 5: Fire-fighting measures**

### 5.1. Suitable (and unsuitable) extinguishing media

- **Unsuitable extinguishing media**: Water (quick-acting extinguisher, reel); risk of puddle expansion. Water; risk of puddle expansion.

### 5.2. Specific hazards arising from the chemical

- **Fire hazard**: DIRECT FIRE HAZARD: Material presenting a fire hazard. INDIRECT FIRE HAZARD: Temperature above flashpoint: higher fire/explosion hazard. Reactions involving a fire hazard: see "Reactivity Hazard".

### 5.3. Special protective equipment and precautions for fire-fighters

- **Precautionary measures fire**: Exposure to fire/heat: keep upwind. Exposure to fire/heat: consider evacuation. Exposure to fire/heat: seal off low-lying areas. Exposure to fire/heat: have neighbourhood close doors and windows.
- **Firefighting instructions**: Cool tanks/drum with water spray/remove them into safety. Do not move the load if exposed to heat. Dilute toxic gases with water spray. Take account of toxic fire-fighting water. Use water moderately and if possible collect or contain it.
- **Protection during firefighting**: Heat/fire exposure: compressed air/oxygen apparatus.

**SECTION 6: Accidental release measures**

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

#### 6.1.1. For non-emergency personnel


6.1.2. For emergency responders
Protective equipment: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions
Prevent soil and water pollution. Prevent spreading in sewers.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up: Take up liquid spill into absorbent material, e.g.: dry sand/earth/vermiculite powdered limestone or saw dust. Scoop absorbed substance into closing containers. Carefully collect the spill/leftovers. Leftovers: neutralize with an aqueous solution of sodium hypochlorite. Damaged/coolied tanks must be emptied. Clean contaminated surfaces with an excess of water. Take collected spill to manufacturer/competent authority. Wash clothing and equipment after handling.

Other information: Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections
For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling
Precautions for safe handling: Use earthed equipment. Keep away from naked flames/heat. At temperature > flashpoint: use spark-/explosionproof appliances. In finely divided state: use spark-/explosionproof appliances. Finely divided: keep away from ignition sources/sparks. Carry operations in the open/under local exhaust/ventilation or with respiratory protection. Exhaust gas must be neutralised. Comply with the legal requirements. Remove contaminated clothing immediately. Clean contaminated clothing. Thoroughly clean/dry the installation before use. Do not discharge the waste into the drain.

Hygiene measures: Wash contaminated clothing before reuse. Contaminated work clothing should not be allowed out of the workplace. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities
Storage conditions: Store in a well-ventilated place. Keep cool. Store locked up. Keep container tightly closed.

Maximum storage period: 24 months

Heat-ignition: KEEP SUBSTANCE AWAY FROM: heat sources.


Special rules on packaging: SPECIAL REQUIREMENTS: closing. dry. clean. correctly labelled. meet the legal requirements. Secure fragile packagings in solid containers.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters
2-mercaptoethanol (60-24-2)
No additional information available

8.2. Appropriate engineering controls
Appropriate engineering controls: Ensure good ventilation of the work station.

Environmental exposure controls: Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment
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Materials for protective clothing:
GIVE GOOD RESISTANCE: neoprene, nitrile rubber, PVC, plastics, rubber

Hand protection:
Gloves

Eye protection:
Face shield

Skin and body protection:
Protective clothing

Respiratory protection:
High gas/vapour concentration: full face mask with filter type A

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Liquid</td>
</tr>
<tr>
<td>Appearance</td>
<td>Liquid.</td>
</tr>
<tr>
<td>Color</td>
<td>Colourless to light yellow</td>
</tr>
<tr>
<td>Odor</td>
<td>Repulsive odour</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>4.6 - 6.0 (50 %)</td>
</tr>
<tr>
<td>Melting point</td>
<td>&lt; -100 °C</td>
</tr>
<tr>
<td>Freezing point</td>
<td>No data available</td>
</tr>
<tr>
<td>Boiling point</td>
<td>155.8 °C (1013.3 hPa)</td>
</tr>
<tr>
<td>Flash point</td>
<td>74 °C (Open cup, 1013.25 hPa)</td>
</tr>
<tr>
<td>Relative evaporation rate (butyl acetate=1)</td>
<td>&lt; 1</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>1.33 hPa (20 °C)</td>
</tr>
<tr>
<td>Vapor pressure at 50 °C</td>
<td>11 hPa</td>
</tr>
<tr>
<td>Relative vapor density at 20 °C</td>
<td>2.7</td>
</tr>
<tr>
<td>Relative density</td>
<td>1.11 (20 °C)</td>
</tr>
<tr>
<td>Relative density of saturated gas/air mixture</td>
<td>1</td>
</tr>
<tr>
<td>Specific gravity / density</td>
<td>1110 kg/m² (20 °C)</td>
</tr>
<tr>
<td>Molecular mass</td>
<td>78.13 g/mol</td>
</tr>
<tr>
<td>Solubility</td>
<td>Soluble in water. Soluble in ethanol. Soluble in ether. Soluble in other organic solvents. Water: 100 g/100ml (20 °C)</td>
</tr>
<tr>
<td>Log Pow</td>
<td>-0.056 (Experimental value, Equivalent or similar to OECD 107, 25 °C)</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>295 °C</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>157 °C</td>
</tr>
<tr>
<td>Viscosity, kinematic</td>
<td>2.9 mm²/s (20 °C, Calculated)</td>
</tr>
<tr>
<td>Viscosity, dynamic</td>
<td>0.322 mPa·s (20 °C)</td>
</tr>
<tr>
<td>Explosion limits</td>
<td>2.3 - 18 vol %</td>
</tr>
<tr>
<td></td>
<td>Lower explosive limit (LEL): 2.3 vol %</td>
</tr>
<tr>
<td></td>
<td>UEL: 18 vol %</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>No data available</td>
</tr>
<tr>
<td>Oxidizing properties</td>
<td>No data available</td>
</tr>
</tbody>
</table>

9.2. Other information

VOC content : 100 %

Other properties : Gas/vapour heavier than air at 20°C. Clear. Slightly volatile. Acid reaction.
SECTION 10: Stability and reactivity

10.1. Reactivity
Reacts violently with (strong) oxidizers: (increased) risk of fire. Reacts violently with many compounds e.g.: with (strong) bases and (strong) reducers. Decomposes slowly on exposure to water (moisture) with (some) acids.

10.2. Chemical stability
Unstable on exposure to moisture.

10.3. Possibility of hazardous reactions
No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid
Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.

10.5. Incompatible materials
No additional information available

10.6. Hazardous decomposition products
Hazardous decomposition products.

SECTION 11: Toxicological information

11.1. Information on toxicological effects
Acute toxicity (oral) : Toxic if swallowed.
Acute toxicity (dermal) : Toxic in contact with skin.
Acute toxicity (inhalation) : Toxic if inhaled. Harmful if inhaled.

2-mercaptoethanol (60-24-2)

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50 oral rat</td>
<td>98 - 168 mg/kg body weight (OECD 401: Acute Oral Toxicity, Rat, Male / female, Weight of evidence, Oral)</td>
</tr>
<tr>
<td>LD50 dermal rabbit</td>
<td>112 - 224 mg/kg body weight (Other, 24 h, Rabbit, Male / female, Experimental value, Dermal)</td>
</tr>
<tr>
<td>LC50 inhalation rat (mg/l)</td>
<td>2.03 mg/l (Other, 4 h, Rat, Male, Weight of evidence, Inhalation (vapours))</td>
</tr>
<tr>
<td>ATE US (oral)</td>
<td>98 mg/kg body weight</td>
</tr>
<tr>
<td>ATE US (dermal)</td>
<td>112 mg/kg body weight</td>
</tr>
<tr>
<td>ATE US (gases)</td>
<td>700 ppm V/4h</td>
</tr>
<tr>
<td>ATE US (vapors)</td>
<td>2.03 mg/l/4h</td>
</tr>
<tr>
<td>ATE US (dust, mist)</td>
<td>2.03 mg/l/4h</td>
</tr>
<tr>
<td>Skin corrosion/irritation</td>
<td>Causes skin irritation.</td>
</tr>
<tr>
<td>pH: 4.6 - 6.0 (50 %)</td>
<td></td>
</tr>
<tr>
<td>Serious eye damage/irritation</td>
<td>Causes serious eye damage.</td>
</tr>
<tr>
<td>pH: 4.6 - 6.0 (50 %)</td>
<td></td>
</tr>
<tr>
<td>Respiratory or skin sensitization</td>
<td>May cause an allergic skin reaction.</td>
</tr>
<tr>
<td>Germ cell mutagenicity</td>
<td>Not classified</td>
</tr>
<tr>
<td>Carcinogenicity</td>
<td>Not classified</td>
</tr>
<tr>
<td>Reproductive toxicity</td>
<td>Not classified</td>
</tr>
<tr>
<td>Specific target organ toxicity – single exposure</td>
<td>May cause damage to organs through prolonged or repeated exposure.</td>
</tr>
<tr>
<td>Aspiration hazard</td>
<td>Not classified</td>
</tr>
<tr>
<td>Viscosity, kinematic</td>
<td>2.9 mm²/s (20 °C, Calculated)</td>
</tr>
<tr>
<td>Potential Adverse human health effects and symptoms</td>
<td>Odour tolerance may develop. Toxic if swallowed. Fatal in contact with skin. Causes skin irritation. Toxic if inhaled. Causes serious eye damage. Caution! Substance is absorbed through the skin.</td>
</tr>
<tr>
<td>Symptoms/effects after skin contact</td>
<td>Red skin. Tingling/irritation of the skin. ON CONTINUOUS EXPOSURE/CONTACT: Caustic burns/corrosion of the skin.</td>
</tr>
<tr>
<td>Symptoms/effects after eye contact</td>
<td>Corrosion of the eye tissue. Inflammation/damage of the eye tissue.</td>
</tr>
</tbody>
</table>
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Symptoms/effects after ingestion:

Chronic symptoms:
- ON CONTINUOUS/REPEATED EXPOSURE/CONTACT: Skin rash/inflammation.

SECTION 12: Ecological information

12.1. Toxicity
- Ecology - general: Dangerous for the environment.
- Ecology - air:
  - Not included in the list of fluorinated greenhouse gases (Regulation (EU) No 517/2014).
  - Photolysis in the air. Not classified as dangerous for the ozone layer (Regulation (EC) No 1005/2009).
- Ecology - water:
  - Very toxic to crustacea. Harmful to fishes. Groundwater pollutant. Inhibition of activated sludge. Harmful to algae.

2-mercaptoethanol (60-24-2)
- LC50 fish 1: 37 mg/l (DIN 38412-15, 96 h, Leuciscus idus, Static system, Fresh water, Experimental value)
- EC50 Daphnia 1: 0.4 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, GLP)

12.2. Persistence and degradability
- Biochemical oxygen demand (BOD): 0.105 g O₂/g substance
- Chemical oxygen demand (COD): 1.894 g O₂/g substance

12.3. Bioaccumulative potential
- 2-mercaptoethanol (60-24-2):
  - Log Pow: -0.056 (Experimental value, Equivalent or similar to OECD 107, 25 °C)
  - Bioaccumulative potential: Not bioaccumulative.

12.4. Mobility in soil
- 2-mercaptoethanol (60-24-2):
  - Log Koc: 0.122 (log Koc, PCKOCWIN v1.66, Calculated value)
  - Ecology - soil: Highly mobile in soil.

12.5. Other adverse effects
- No additional information available

SECTION 13: Disposal considerations

13.1. Disposal methods
- Waste treatment methods:
  - Waste treatment methods.
- Product/Packaging disposal recommendations:
  - Do not discharge into drains or the environment. Remove waste in accordance with local and/or national regulations. Hazardous waste shall not be mixed together with other waste. Different types of hazardous waste shall not be mixed together if this may entail a risk of pollution or create problems for the further management of the waste. Hazardous waste shall be managed responsibly. All entities that store, transport or handle hazardous waste shall take the necessary measures to prevent risks of pollution or damage to people or animals. Recycle by distillation. Remove to an authorized waste incinerator for solvents with energy recovery.

Additional information:

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

- Transport document description: UN2966 Thioglycol, 6.1, II
- UN-No. (DOT): UN2966
- Proper Shipping Name (DOT): Thioglycol
- Packing group (DOT): II - Medium Danger
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Hazard labels (DOT) : 6.1 - Poison

Dangerous for the environment : Yes
Marine pollutant : Yes

DOT Packaging Non Bulk (49 CFR 173.xxx) : 202
DOT Packaging Bulk (49 CFR 173.xxx) : 243
DOT Special Provisions (49 CFR 172.102) : IB2 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized. T7 - 4 178.274(d)(2) Normal............. 178.275(d)(3) TP2 - a. The maximum degree of filling must not exceed the degree of filling determined by the following: (image) Where: tr is the maximum mean bulk temperature during transport, tf is the temperature in degrees celsius of the liquid during filling, and a is the mean coefficient of cubical expansion of the liquid between the mean temperature of the liquid during filling (tf) and the maximum mean bulk temperature during transportation (tr) both in degrees celsius. b. For liquids transported under ambient conditions may be calculated using the formula: (image) Where: $d_{15}$ and $d_{50}$ are the densities (in units of mass per unit volume) of the liquid at 15 C (59 F) and 50 C (122 F), respectively.

DOT Packaging Exceptions (49 CFR 173.xxx) : 153
DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27) : 5 L
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75) : 60 L
DOT Vessel Stowage Location : A - The material may be stowed “on deck” or “under deck” on a cargo vessel and on a passenger vessel.
Other information : No supplementary information available.

Transportation of Dangerous Goods

Transport by sea
Transport document description (IMDG) : UN 2966 thioglycol, 6.1, II, MARINE POLLUTANT/ENVIRONMENTALLY HAZARDOUS
UN-No. (IMDG) : 2966
Proper Shipping Name (IMDG) : thioglycol
Class (IMDG) : 6.1 - Toxic substances
Packing group (IMDG) : II - substances presenting medium danger
EmS-No. (1) : F-A
EmS-No. (2) : S-A
Marine pollutant : Yes

Air transport
Transport document description (IATA) : UN 2966 Thioglycol, 6.1, II, ENVIRONMENTALLY HAZARDOUS
UN-No. (IATA) : 2966
Proper Shipping Name (IATA) : Thioglycol
Class (IATA) : 6.1 - Toxic Substances
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<table>
<thead>
<tr>
<th>Packing group (IATA)</th>
<th>II - Medium Danger</th>
</tr>
</thead>
</table>

### SECTION 15: Regulatory information

#### 15.1. US Federal regulations

- **2-mercaptoethanol (60-24-2)**
  - Not listed on the United States TSCA (Toxic Substances Control Act) inventory

#### 15.2. International regulations

- **CANADA**
  - EU-Regulations
  - **National regulations**
    - No additional information available

#### 15.3. US State regulations

### SECTION 16: Other information

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Revision date : 05/11/2017

Full text of H-phrases:

<table>
<thead>
<tr>
<th>H227</th>
<th>Combustible liquid</th>
</tr>
</thead>
<tbody>
<tr>
<td>H301</td>
<td>Toxic if swallowed</td>
</tr>
<tr>
<td>H311</td>
<td>Toxic in contact with skin</td>
</tr>
<tr>
<td>H315</td>
<td>Causes skin irritation</td>
</tr>
<tr>
<td>H317</td>
<td>May cause an allergic skin reaction</td>
</tr>
<tr>
<td>H318</td>
<td>Causes serious eye damage</td>
</tr>
<tr>
<td>H331</td>
<td>Toxic if inhaled</td>
</tr>
<tr>
<td>H332</td>
<td>Harmful if inhaled</td>
</tr>
<tr>
<td>H373</td>
<td>May cause damage to organs through prolonged or repeated exposure</td>
</tr>
<tr>
<td>H400</td>
<td>Very toxic to aquatic life</td>
</tr>
<tr>
<td>H410</td>
<td>Very toxic to aquatic life with long lasting effects</td>
</tr>
</tbody>
</table>

**NFPA health hazard** : 3 - Materials that, under emergency conditions, can cause serious or permanent injury.

**NFPA fire hazard** : 2 - Materials that must be moderately heated or exposed to relatively high ambient temperatures before ignition can occur.

**NFPA reactivity** : 1 - Materials that in themselves are normally stable but can become unstable at elevated temperatures and pressures.

SDS US (GHS HazCom 2012)

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.