# Section 1: Identification of the substance/mixture and of the company/undertaking

**Product information**

<table>
<thead>
<tr>
<th>Product Name</th>
<th>Scentinel® A Gas Odorant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Material</td>
<td>1119674, 1119564, 1106807, 1098462, 1102596, 1086453, 1098407, 1086452, 1102264, 1072060, 1098463, 1103512, 1070006, 1024777, 1024776, 1024775, 1024774, 1029441, 1029442, 1029443, 1029444, 1029445</td>
</tr>
</tbody>
</table>

**Company**

Chevron Phillips Chemical Company LP  
10001 Six Pines Drive  
The Woodlands, TX 77380

**Emergency telephone:**

**Health:**  
866.442.9628 (North America)  
1.832.813.4984 (International)

**Transport:**

CHEMTREC 800.424.9300 or 703.527.3887(int'l)  
Asia: CHEMWATCH (+61 2 9186 1132) China: 0532 8388 9090  
EUROPE: BIG +32.14.584545 (phone) or +32.14583516 (telefax)  
Mexico CHEMTREC 01-800-681-9531 (24 hours)  
South America SOS-Cotec Inside Brazil: 0800.111.767 Outside Brazil: +55.19.3467.1600  
Argentina: +(54)-1159839431

**Responsible Department:**  
Product Safety and Toxicology Group

**E-mail address:**  
SDS@CPChem.com

**Website:**  
www.CPChem.com

**ODOR-FADE WARNING**

A GAS LEAK CAN CAUSE A FIRE OR EXPLOSION RESULTING IN SERIOUS INJURY OR DEATH.

Be aware that the stenching chemical added to gas to make it detectable may not warn of a gas leak or the presence of propane or natural gas to all persons in every instance.

Instances where the odorant in an odorized gas may be undetectable include:

- Odor intensity may fade or be eliminated for a variety of chemical and physical causes, including the oxidation of rusting pipes, adsorption into or sticking onto the interior of pipes or appliances, or absorption into liquids.
- Contact with soil in underground leaks may de-odorize or remove odorant from the gas.
- Some people have a diminished ability, or inability to smell the stench. Factors that negatively...
affect a person’s sense of smell include age, gender, medical conditions, and alcohol/tobacco usage.

- The stench of odorized gas may not awaken sleeping persons.
- Other odors may mask or hide the stench.
- Exposure to the odor for even a short period of time, may cause nasal fatigue, where a person can no longer smell the stench.

Gas detectors listed by the Underwriters Laboratories (UL) can be used as an extra measure of safety for detecting gas leaks, especially under conditions where the odorant alone may not provide an adequate warning. Gas detectors emit a loud, shrill sound when gas is present and do not depend on sense of smell. Because the odor intensity can fade or people may have problems with their sense of smell, we recommend installing, per manufacturer’s instructions, one or more combustible gas detectors, in suitable locations to ensure adequate coverage to detect gas leaks.

Educate yourself, your employees, and your customers with the content of this warning and other important facts associated with the so-called “odor-fade phenomenon.”

SECTION 2: Hazards identification

Classification of the substance or mixture
This product has been classified in accordance with the hazard communication standard 29 CFR 1910.1200; the SDS and labels contain all the information as required by the standard.

Classification

- Flammable liquids, Category 1
- Acute toxicity, Category 4, Oral
- Acute toxicity, Category 4, Inhalation
- Skin sensitization, Sub-category 1B

Labeling

Symbol(s):

- Flammable:
- Warning:

Signal Word: Danger

Hazard Statements:

- H224: Extremely flammable liquid and vapor.
- H302: Harmful if swallowed.
- H317: May cause an allergic skin reaction.
- H332: Harmful if inhaled.

Precautionary Statements:

**Prevention:**

- P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.
- P233 Keep container tightly closed.
- P240 Ground/bond container and receiving equipment.
- P241 Use explosion-proof electrical/ventilating/lighting/equipment.
- P242 Use only non-sparking tools.
- P243 Take precautionary measures against static discharge.
- P261 Avoid breathing dust/fume/gas/mist/vapors/spray.
- P264 Wash skin thoroughly after handling.
- P270 Do not eat, drink or smoke when using this product.
- P271 Use only outdoors or in a well-ventilated area.
- P280 Wear protective gloves/eye protection/face protection.

Response:
P301 + P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
P303 + P361 + P353 IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.
P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P311 Call a POISON CENTER/doctor.
P330 Rinse mouth.
P337 + P313 If eye irritation persists: Get medical advice/ attention.
P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.

Storage:
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.

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

Carcinogenicity:

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

NTP
No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

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

SECTION 3: Composition/information on ingredients

Synonyms : ETS
            Ethanethiol
            Ethyl Mercaptan

Molecular formula : C2H6S

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS-No.</th>
<th>Weight %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethyl Mercaptan</td>
<td>75-08-1</td>
<td>99</td>
</tr>
</tbody>
</table>

SECTION 4: First aid measures

General advice : Move out of dangerous area. Consult a physician. Show this material safety data sheet to the doctor in attendance. Symptoms of poisoning may appear several hours later. Do
**Scentinel® A Gas Odorant**

**Version 3.1**

| **If inhaled** | Call a physician or poison control center immediately. If unconscious, place in recovery position and seek medical advice. |
| **In case of skin contact** | If on skin, rinse well with water. If on clothes, remove clothes. |
| **In case of eye contact** | Immediately flush eye(s) with plenty of water. Remove contact lenses. Protect unharmed eye. Keep eye wide open while rinsing. If eye irritation persists, consult a specialist. |
| **If swallowed** | Keep respiratory tract clear. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician. Take victim immediately to hospital. |

### SECTION 5: Firefighting measures

| **Flash point** | -48 °C (-54 °F) |
| **Autoignition temperature** | 295 °C (563 °F) |
| **Suitable extinguishing media** | Alcohol-resistant foam. Carbon dioxide (CO2). Dry chemical. |
| **Unsuitable extinguishing media** | High volume water jet. |
| **Specific hazards during firefighting** | Do not allow run-off from fire fighting to enter drains or water courses. |
| **Special protective equipment for fire-fighters** | Wear self-contained breathing apparatus for firefighting if necessary. |
| **Further information** | Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. For safety reasons in case of fire, cans should be stored separately in closed containments. Use a water spray to cool fully closed containers. |
| **Fire and explosion protection** | Do not spray on an open flame or any other incandescent material. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapors). Use only explosion-proof equipment. Keep away from open flames, hot surfaces and sources of ignition. |
| **Hazardous decomposition products** | Carbon oxides. Sulfur oxides. |

### SECTION 6: Accidental release measures

| **Personal precautions** | Use personal protective equipment. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapors accumulating to |

**SDS Number:** 1000000068741

4/14
form explosive concentrations. Vapors can accumulate in low areas.

Environmental precautions: Prevent product from entering drains. Prevent further leakage or spillage if safe to do so. If the product contaminates rivers and lakes or drains inform respective authorities.

Methods for cleaning up: Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

SECTION 7: Handling and storage

Handling

Advice on safe handling: Avoid formation of aerosol. Do not breathe vapors/dust. Avoid contact with skin and eyes. For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area. Take precautionary measures against static discharges. Provide sufficient air exchange and/or exhaust in work rooms. Open drum carefully as content may be under pressure. Dispose of rinse water in accordance with local and national regulations.

Advice on protection against fire and explosion: Do not spray on an open flame or any other incandescent material. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapors). Use only explosion-proof equipment. Keep away from open flames, hot surfaces and sources of ignition.

Storage

Requirements for storage areas and containers: Prevent unauthorized access. No smoking. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Observe label precautions. Electrical installations / working materials must comply with the technological safety standards.

SECTION 8: Exposure controls/personal protection

Ingredients with workplace control parameters

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>Basis</th>
<th>Value</th>
<th>Control parameters</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethyl Mercaptan</td>
<td>ACGIH</td>
<td>TWA</td>
<td>0.5 ppm, CNS impair, URT irr</td>
<td></td>
</tr>
<tr>
<td></td>
<td>OSHA Z-1</td>
<td>C</td>
<td>10 ppm, 25 mg/m³ (b)</td>
<td>(b), (C)</td>
</tr>
<tr>
<td></td>
<td>OSHA Z-1-A</td>
<td>TWA</td>
<td>0.5 ppm, 1 mg/m³</td>
<td></td>
</tr>
</tbody>
</table>

(b) The value in mg/m³ is approximate.
(C) Ceiling limit is to be determined from breathing-zone air samples.
CNS impair Central Nervous System impairment
URT irr Upper Respiratory Tract irritation

Immediately Dangerous to Life or Health Concentrations (IDLH)

<table>
<thead>
<tr>
<th>Substance name</th>
<th>CAS-No.</th>
<th>Control parameters</th>
<th>Update</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDS Number:100000068741</td>
<td>5/14</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
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<table>
<thead>
<tr>
<th>Ethyl Mercaptan</th>
<th>75-08-1</th>
<th>Immediately Dangerous to Life or Health Concentration Value</th>
<th>1995-03-01</th>
</tr>
</thead>
</table>

Engineering measures

Adequate ventilation to control airborne concentrations below the exposure guidelines/limits. Consider the potential hazards of this material (see Section 2), applicable exposure limits, job activities, and other substances in the work place when designing engineering controls and selecting personal protective equipment. If engineering controls or work practices are not adequate to prevent exposure to harmful levels of this material, the personal protective equipment listed below is recommended. The user should read and understand all instructions and limitations supplied with the equipment since protection is usually provided for a limited time or under certain circumstances.

Personal protective equipment

Respiratory protection: Wear a supplied-air NIOSH approved respirator unless ventilation or other engineering controls are adequate to maintain minimal oxygen content of 19.5% by volume under normal atmospheric pressure. Wear a NIOSH approved respirator that provides protection when working with this material if exposure to harmful levels of airborne material may occur, such as: Air-Purifying Respirator for Organic Vapors. Use a positive pressure, air-supplying respirator if there is potential for uncontrolled release, exposure levels are not known, or other circumstances where air-purifying respirators may not provide adequate protection.

Hand protection: The suitability for a specific workplace should be discussed with the producers of the protective gloves. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time. Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.

Eye protection: Eye wash bottle with pure water. Tightly fitting safety goggles. Wear face-shield and protective suit for abnormal processing problems.

Skin and body protection: Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place. Wear as appropriate: Remove and wash contaminated clothing before re-use. Skin should be washed after contact. Flame retardant protective clothing. Workers should wear antistatic footwear.

Hygiene measures: Avoid contact with skin, eyes and clothing. When using do not eat or drink. When using do not smoke. Wash hands before breaks and immediately after handling the product.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Appearance

<table>
<thead>
<tr>
<th>Form</th>
<th>Physical state</th>
<th>Color</th>
<th>Odor</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Liquid</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Liquid</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Colorless</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Repulsive</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

SDS Number:100000068741 6/14
**Safety data**

- **Flash point**: -48 °C (-54 °F)
- **Lower explosion limit**: 2.8 %(V)
- **Upper explosion limit**: 18 %(V)
- **Oxidizing properties**: No
- **Autoignition temperature**: 295 °C (563 °F)
- **Molecular formula**: C2H6S
- **Molecular weight**: 62.14 g/mol
- **pH**: Not applicable
- **Pour point**: No data available
- **Boiling point/boiling range**: 35 °C (95 °F)
- **Vapor pressure**: 16.20 PSI at 37.8 °C (100.0 °F)
- **Relative density**: 0.84 at 15.6 °C (60.1 °F)
- **Water solubility**: Negligible
- **Partition coefficient: n-octanol/water**: No data available
- **Viscosity, kinematic**: No data available
- **Relative vapor density**: 2.1 (Air = 1.0)
- **Evaporation rate**: 1
- **Percent volatile**: > 99 %

**SECTION 10: Stability and reactivity**

- **Chemical stability**: This material is considered stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

- **Possibility of hazardous reactions**
  - **Conditions to avoid**: Heat, flames and sparks.
  - **Materials to avoid**: May react with oxygen and strong oxidizing agents, such as chlorates, nitrates, peroxides, etc.
Hazardous decomposition products: Carbon oxides, Sulfur oxides

Other data: No decomposition if stored and applied as directed.

SECTION 11: Toxicological information

Acute oral toxicity
Ethyl Mercaptan: LD50: 682 mg/kg
Species: Rat
Sex: male
Method: Fixed Dose Method

Acute inhalation toxicity
Ethyl Mercaptan: LC50: 11 mg/l
Exposure time: 4 h
Test atmosphere: vapor
Method: Acute toxicity estimate

Skin irritation
Ethyl Mercaptan: Information given is based on data obtained from similar substances.

Eye irritation
Ethyl Mercaptan: Information given is based on data obtained from similar substances.

Sensitization
Ethyl Mercaptan: The product is a skin sensitizer, sub-category 1B.
Information given is based on data obtained from similar substances.

Repeated dose toxicity
Ethyl Mercaptan: Species: Rat, Male and female
Sex: Male and female
Application Route: Inhalation
Dose: 0, 25, 100, 400 ppm
Exposure time: 13 wks
Number of exposures: 6 hr/d, 5 d/wk
NOEL: 100 ppm
Lowest observable effect level: 400 ppm
Method: OECD Guideline 413
Information given is based on data obtained from similar substances.
Species: Rat, Male and female  
Sex: Male and female  
Application Route: Oral  
Dose: 0, 10, 50, 200 mg/kg  
Exposure time: 42-53 days  
NOEL: 50 mg/kg  
Method: OECD Guideline 422  
Information given is based on data obtained from similar substances.

**Reproductive toxicity**

Ethyl Mercaptan  
Species: Rat  
Sex: Male and female  
Application Route: Oral diet  
Dose: 0, 10, 50, 200 mg/kg  
Exposure time: 42-53 days  
Number of exposures: once daily  
Method: OECD Guideline 422  
NOAEL Parent: 200 mg/kg  
NOAEL F1: 50 mg/kg  
Information given is based on data obtained from similar substances.

**Developmental Toxicity**

Ethyl Mercaptan  
Species: Rat  
Application Route: Inhalation  
Dose: 0, 0.037, 0.28, or 0.56 mg/L  
Number of exposures: 6 hrs/d  
Test period: GD 6-19  
Method: OECD Guideline 414  
NOAEL Teratogenicity: > 0.56 mg/l  
Information given is based on data obtained from similar substances.

Species: Rat  
Application Route: Inhalation  
Dose: 0, 10, 100, 200 ppm  
Number of exposures: 6 hrs/d  
Test period: GD 6-19  
Method: OECD Guideline 414  
NOAEL Teratogenicity: > 200 ppm  
NOAEL Maternal: > 200 ppm  
Information given is based on data obtained from similar substances.

**Aspiration toxicity**

Ethyl Mercaptan  
May be harmful if swallowed and enters airways.

**CMR effects**

Ethyl Mercaptan  
Carcinogenicity: Not available  
Mutagenicity: Not mutagenic in Ames Test.  
Teratogenicity: Animal testing did not show any effects on fetal development.  
Reproductive toxicity: Animal testing did not show any effects on fertility.
**Scentinel® A Gas Odorant**

**Further information**: Solvents may degrease the skin.

## SECTION 12: Ecological information

### Toxicty to fish

<table>
<thead>
<tr>
<th>Substance</th>
<th>Effect</th>
<th>Concentration</th>
<th>Exposure Time</th>
<th>Species Description</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethyl Mercaptan</td>
<td>2.4 mg/l</td>
<td></td>
<td>96 h</td>
<td>Oncorhynchus mykiss (rainbow trout)</td>
<td>OECD Test Guideline 203</td>
</tr>
</tbody>
</table>

### Toxicity to daphnia and other aquatic invertebrates

<table>
<thead>
<tr>
<th>Substance</th>
<th>EC50</th>
<th>Concentration</th>
<th>Exposure Time</th>
<th>Species Description</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethyl Mercaptan</td>
<td>&lt; 0.1 mg/l</td>
<td></td>
<td>48 h</td>
<td>Daphnia magna (Water flea)</td>
<td>OECD Test Guideline 202</td>
</tr>
</tbody>
</table>

### Toxicity to algae

<table>
<thead>
<tr>
<th>Substance</th>
<th>EC50</th>
<th>Concentration</th>
<th>Exposure Time</th>
<th>Species Description</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethyl Mercaptan</td>
<td>3 mg/l</td>
<td></td>
<td>72 h</td>
<td>Pseudokirchneriella subcapitata (green algae)</td>
<td>OECD Test Guideline 201</td>
</tr>
</tbody>
</table>

### M-Factor

<table>
<thead>
<tr>
<th>Substance</th>
<th>M-Factor (Chron. Aquat. Tox.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ethanethiol</td>
<td>10</td>
</tr>
</tbody>
</table>

**Elimination information (persistence and degradability)**

- **Bioaccumulation**: This material is not expected to bioaccumulate.
- **Biodegradability**: This material is not expected to be readily biodegradable.

### Ecotoxicology Assessment

- **Acute aquatic toxicity**
  - Ethyl Mercaptan: Very toxic to aquatic life.

- **Chronic aquatic toxicity**
  - Ethyl Mercaptan: Very toxic to aquatic life with long lasting effects.

**Results of PBT assessment**

- Ethyl Mercaptan: Non-classified PBT substance, Non-classified vPvB substance

**Additional ecological information**

- An environmental hazard cannot be excluded in the event of unprofessional handling or disposal., Very toxic to aquatic life with long lasting effects.
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Revision Date 2018-07-12

SECTION 13: Disposal considerations

The information in this SDS pertains only to the product as shipped. Use material for its intended purpose or recycle if possible. This material, if it must be discarded, may meet the criteria of a hazardous waste as defined by US EPA under RCRA (40 CFR 261) or other State and local regulations. Measurement of certain physical properties and analysis for regulated components may be necessary to make a correct determination. If this material is classified as a hazardous waste, federal law requires disposal at a licensed hazardous waste disposal facility.

Product : The product should not be allowed to enter drains, water courses or the soil. Do not contaminate ponds, waterways or ditches with chemical or used container. Send to a licensed waste management company.

Contaminated packaging : Empty remaining contents. Dispose of as unused product. Do not re-use empty containers. Do not burn, or use a cutting torch on, the empty drum.

SECTION 14: Transport information

The shipping descriptions shown here are for bulk shipments only, and may not apply to shipments in non-bulk packages (see regulatory definition).

Consult the appropriate domestic or international mode-specific and quantity-specific Dangerous Goods Regulations for additional shipping description requirements (e.g., technical name or names, etc.) Therefore, the information shown here, may not always agree with the bill of lading shipping description for the material. Flashpoints for the material may vary slightly between the SDS and the bill of lading.

US DOT (UNITED STATES DEPARTMENT OF TRANSPORTATION)

UN2363, ETHYL MERCAPTAN, 3, I, MARINE POLLUTANT, (ETHYL MERCAPTAN)

IMO / IMDG (INTERNATIONAL MARITIME DANGEROUS GOODS)

UN2363, ETHYL MERCAPTAN, 3, I, (-48 °C), MARINE POLLUTANT, (ETHYL MERCAPTAN)

IATA (INTERNATIONAL AIR TRANSPORT ASSOCIATION)

UN2363, ETHYL MERCAPTAN, 3, I

ADR (AGREEMENT ON DANGEROUS GOODS BY ROAD (EUROPE))

UN2363, ETHYL MERCAPTAN, 3, I, (D/E), ENVIRONMENTALLY HAZARDOUS, (ETHYL MERCAPTAN)

RID (REGULATIONS CONCERNING THE INTERNATIONAL TRANSPORT OF DANGEROUS GOODS (EUROPE))

UN2363, ETHYL MERCAPTAN, 3, I, ENVIRONMENTALLY HAZARDOUS, (ETHYL MERCAPTAN)

ADN (EUROPEAN AGREEMENT CONCERNING THE INTERNATIONAL CARRIAGE OF DANGEROUS GOODS BY INLAND WATERWAYS)
UN2363, ETHYL MERCAPTAN, 3, I, ENVIRONMENTALLY HAZARDOUS, (ETHYL MERCAPTAN)

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

SECTION 15: Regulatory information

National legislation

SARA 311/312 Hazards : Flammable (gases, aerosols, liquids, or solids)
                         Acute toxicity (any route of exposure)
                         Respiratory or skin sensitization

CERCLA Reportable Quantity : This material does not contain any components with a CERCLA RQ.

SARA 302 Reportable Quantity : This material does not contain any components with a SARA 302 RQ.

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

SARA 304 Reportable Quantity : This material does not contain any components with a section 304 EHS RQ.

SARA 313 Ingredients : 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

Ozone-Depletion Potential : 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 112 (40 CFR 61).

The following chemical(s) are listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F):
                         : Ethyl Mercaptan - 75-08-1

SDS Number:100000068741  12/14
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).

**US State Regulations**

Pennsylvania Right To Know : Ethyl Mercaptan - 75-08-1

New Jersey Right To Know : Ethyl Mercaptan - 75-08-1

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

**Notification status**

Europe REACH : On the inventory, or in compliance with the inventory
United States of America (USA) : On the inventory, or in compliance with the inventory
TSCA : On the inventory, or in compliance with the inventory
Canada DSL : On the inventory, or in compliance with the inventory
Australia AICS : On the inventory, or in compliance with the inventory
New Zealand NZIoC : On the inventory, or in compliance with the inventory
Japan ENCS : On the inventory, or in compliance with the inventory
Korea KECl : On the inventory, or in compliance with the inventory
Philippines PICCS : On the inventory, or in compliance with the inventory
China IECSC : On the inventory, or in compliance with the inventory

**SECTION 16: Other information**

**NFPA Classification** : Health Hazard: 2
                         Fire Hazard: 4
                         Reactivity Hazard: 0

**Further information**

Legacy SDS Number : 25580

Significant changes since the last version are highlighted in the margin. This version replaces all previous versions.

The information in this SDS pertains only to the product as shipped.
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.

### Key or legend to abbreviations and acronyms used in the safety data sheet

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACGIH</td>
<td>American Conference of Government Industrial Hygienists</td>
</tr>
<tr>
<td>AICS</td>
<td>Australia, Inventory of Chemical Substances</td>
</tr>
<tr>
<td>DSL</td>
<td>Canada, Domestic Substances List</td>
</tr>
<tr>
<td>NDSL</td>
<td>Canada, Non-Domestic Substances List</td>
</tr>
<tr>
<td>CNS</td>
<td>Central Nervous System</td>
</tr>
<tr>
<td>CAS</td>
<td>Chemical Abstract Service</td>
</tr>
<tr>
<td>EC50</td>
<td>Effective Concentration</td>
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<tr>
<td>EC50</td>
<td>Effective Concentration 50%</td>
</tr>
<tr>
<td>EOSCA</td>
<td>European Oilfield Specialty Chemicals Association</td>
</tr>
<tr>
<td>EINECS</td>
<td>European Inventory of Existing Chemical Substances</td>
</tr>
<tr>
<td>MAK</td>
<td>Germany Maximum Concentration Values</td>
</tr>
<tr>
<td>GHS</td>
<td>Globally Harmonized System</td>
</tr>
<tr>
<td>IC50</td>
<td>Inhibition Concentration 50%</td>
</tr>
<tr>
<td>IARC</td>
<td>International Agency for Research on Cancer</td>
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<tr>
<td>IECSC</td>
<td>Inventory of Existing Chemical Substances in China</td>
</tr>
<tr>
<td>ENCS</td>
<td>Japan, Inventory of Existing and New Chemical Substances</td>
</tr>
<tr>
<td>KECI</td>
<td>Korea, Existing Chemical Inventory</td>
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<tr>
<td>&lt;=</td>
<td>Less Than or Equal To</td>
</tr>
<tr>
<td>LC50</td>
<td>Lethal Concentration 50%</td>
</tr>
<tr>
<td>LD50</td>
<td>Lethal Dose 50%</td>
</tr>
<tr>
<td>LOAEL</td>
<td>Lowest Observed Adverse Effect Level</td>
</tr>
<tr>
<td>NFPA</td>
<td>National Fire Protection Agency</td>
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<tr>
<td>NIOSH</td>
<td>National Institute for Occupational Safety &amp; Health</td>
</tr>
<tr>
<td>NTP</td>
<td>National Toxicology Program</td>
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<tr>
<td>NZIoC</td>
<td>New Zealand Inventory of Chemicals</td>
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<tr>
<td>NOAEL</td>
<td>No Observable Adverse Effect Level</td>
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<tr>
<td>NOEC</td>
<td>No Observed Effect Concentration</td>
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<tr>
<td>OSHA</td>
<td>Occupational Safety &amp; Health Administration</td>
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<tr>
<td>PEL</td>
<td>Permissible Exposure Limit</td>
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<td>PICCS</td>
<td>Philippines Inventory of Commercial Chemical Substances</td>
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<tr>
<td>PRNT</td>
<td>Presumed Not Toxic</td>
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<td>RCRA</td>
<td>Resource Conservation Recovery Act</td>
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<td>STEL</td>
<td>Short-term Exposure Limit</td>
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<tr>
<td>SARA</td>
<td>Superfund Amendments and Reauthorization Act.</td>
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<tr>
<td>TLV</td>
<td>Threshold Limit Value</td>
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<tr>
<td>TWA</td>
<td>Time Weighted Average</td>
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<tr>
<td>TSCA</td>
<td>Toxic Substance Control Act</td>
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<tr>
<td>UVCB</td>
<td>Unknown or Variable Composition, Complex Reaction Products, and Biological Materials</td>
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<tr>
<td>WHMIS</td>
<td>Workplace Hazardous Materials Information System</td>
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