Hydrogen Sulfide  
Safety Data Sheet P-4611  
Date of issue: 01/01/1979  
Revision date: 03/20/2015  
Supersedes: 06/01/2014  

EN (English US)  
SDS ID: P-4611  

SECTION: 1. Product and company identification  

1.1. Product identifier  
Product form: Substance  
Name: Hydrogen Sulfide  
CAS No: 7783-06-4  
Formula: H2S  
Other means of identification: Sulfuretted hydrogen, sulfur hydride, hydrosulfuric acid, hepatic gas, stink damp  

1.2. Relevant identified uses of the substance or mixture and uses advised against  
Use of the substance/mixture: Industrial use. Use as directed.  

1.3. Details of the supplier of the safety data sheet  
Praxair, Inc.  
39 Old Ridgebury Road  
Danbury, CT 06810-5113 - USA  
T 1-800-772-9247 (1-800-PRAXAIR) - F 1-716-879-2146  
www.praxair.com  

1.4. Emergency telephone number  
Emergency number: Onsite Emergency: 1-800-645-4633  
CHEMTREC, 24hr/day 7days/week — Within USA: 1-800-424-9300, Outside USA: 001-703-527-3887 (collect calls accepted, Contract 17729)  

SECTION 2: Hazards identification  

2.1. Classification of the substance or mixture  
Classification (GHS-US)  
Flam. Gas 1 H220  
Liquefied gas H280  
Acute Tox. 2 (Inhalation:gas) H330  
STOT SE 3 H335  
Aquatic Acute 1 H400  

2.2. Label elements  
GHS-US labeling  
Hazard pictograms (GHS-US):  

![](image)  
Signal word (GHS-US): DANGER  
Hazard statements (GHS-US): H220 - EXTREMELY FLAMMABLE GAS  
H280 - CONTAINS GAS UNDER PRESSURE; MAY EXPLODE IF HEATED  
H330 - FATAL IF INHALED  
H335 - MAY CAUSE RESPIRATORY IRRITATION  
H400 - VERY TOXIC TO AQUATIC LIFE  
CGA-HG04 - MAY FORM EXPLOSIVE MIXTURES WITH AIR  
CGA-HG11 - SYMPTOMS MAY BE DELAYED  
CGA-HG16 - EXTENDED EXPOSURE TO GAS REDUCES THE ABILITY TO SMELL SULFIDES.  

Precautionary statements (GHS-US): P202 - Do not handle until all safety precautions have been read and understood  
P210 - Keep away from Heat, Open flames, Sparks, Hot surfaces. - No smoking  
P260 - Do not breathe gas  
P271+P403 - Use and store only outdoors or in a well-ventilated place.  
P273 - Avoid release to the environment.
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2.3. Other hazards
Other hazards not contributing to the classification: Contact with liquid may cause cold burns/frostbite.

2.4. Unknown acute toxicity (GHS US)
No data available

SECTION 3: Composition/information on ingredients

3.1. Substance
<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrogen Sulfide (Main constituent)</td>
<td>(CAS No) 7783-06-4</td>
<td>100</td>
</tr>
</tbody>
</table>

3.2. Mixture
Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures
First-aid measures after inhalation: Immediately remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, qualified personnel may give oxygen. Call a physician.
First-aid measures after skin contact: For exposure to liquid, immediately warm frostbite area with warm water not to exceed 105°F (41°C). Water temperature should be tolerable to normal skin. Maintain skin warming for at least 15 minutes or until normal coloring and sensation have returned to the affected area. In case of massive exposure, remove clothing while showering with warm water. Seek medical evaluation and treatment as soon as possible.
First-aid measures after eye contact: Immediately flush eyes thoroughly with water for at least 15 minutes. Hold the eyelids open and away from the eyeballs to ensure that all surfaces are flushed thoroughly. Contact an ophthalmologist immediately.
First-aid measures after ingestion: Ingestion is not considered a potential route of exposure.

4.2. Most important symptoms and effects, both acute and delayed
No additional information available

4.3. Indication of any immediate medical attention and special treatment needed
Obtain medical assistance. Treat with corticosteroid spray as soon as possible after inhalation.

SECTION 5: Firefighting measures

5.1. Extinguishing media
Suitable extinguishing media: Carbon dioxide, Dry chemical, Water spray or fog. Use extinguishing media appropriate for surrounding fire.
## 5.2. Special hazards arising from the substance or mixture

<table>
<thead>
<tr>
<th>Fire hazard</th>
<th>EXTREMELY FLAMMABLE GAS. If venting or leaking gas catches fire, do not extinguish flames. Flammable vapors may spread from leak, creating an explosive reignition hazard. Vapors can be ignited by pilot lights, other flames, smoking, sparks, heaters, electrical equipment, static discharge, or other ignition sources at locations distant from product handling point. Explosive atmospheres may linger. Before entering an area, especially a confined area, check the atmosphere with an appropriate device.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Explosion hazard</td>
<td>EXTREMELY FLAMMABLE GAS. Forms explosive mixtures with air and oxidizing agents.</td>
</tr>
<tr>
<td>Reactivity</td>
<td>No reactivity hazard other than the effects described in sub-sections below.</td>
</tr>
</tbody>
</table>

## 5.3. Advice for firefighters

**Firefighting instructions**: DANGER! Toxic, flammable liquid and gas under pressure

Evacuate all personnel from the danger area. Use self-contained breathing apparatus (SCBA) and protective clothing. Immediately cool containers with water from maximum distance. Stop flow of gas if safe to do so, while continuing cooling water spray. Remove ignition sources if safe to do so. Remove containers from area of fire if safe to do so. On-site fire brigades must comply with OSHA 29 CFR 1910.156 and applicable standards under 29 CFR 1910 Subpart L—Fire Protection.

**Special protective equipment for fire fighters**: Standard protective clothing and equipment (Self Contained Breathing Apparatus) for fire fighters.

**Other information**: Containers are equipped with a pressure relief device. (Exceptions may exist where authorized by DOT.).

## SECTION 6: Accidental release measures

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

**General measures**: DANGER! Toxic, flammable liquid and gas under pressure. Forms explosive mixtures with air and oxidizing agents. Immediately evacuate all personnel from danger area. Use self-contained breathing apparatus where needed. Remove all sources of ignition if safe to do so. Reduce vapors with fog or fine water spray, taking care not to spread liquid with water. Shut off flow if safe to do so. Ventilate area or move container to a well-ventilated area. Flammable vapors may spread from leak and could explode if reignited by sparks or flames. Explosive atmospheres may linger. Before entering area, especially confined areas, check atmosphere with an appropriate device.

#### 6.1.1. For non-emergency personnel

No additional information available

#### 6.1.2. For emergency responders

No additional information available

### 6.2. Environmental precautions

Try to stop release. Reduce vapor with fog or fine water spray. Prevent waste from contaminating the surrounding environment. Prevent soil and water pollution. Dispose of contents/container in accordance with local/regional/national/international regulations. Contact supplier for any special requirements.

### 6.3. Methods and material for containment and cleaning up

No additional information available

### 6.4. Reference to other sections

See also sections 8 and 13.
SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling: Leak-check system with soapy water; never use a flame.

All piped systems and associated equipment must be grounded.

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use only non-sparking tools. Use only explosion-proof equipment.

Wear leather safety gloves and safety shoes when handling cylinders. Protect cylinders from physical damage; do not drag, roll, slide or drop. While moving cylinder, always keep in place removable valve cover. Never attempt to lift a cylinder by its cap; the cap is intended solely to protect the valve. When moving cylinders, even for short distances, use a cart (trolley, hand truck, etc.) designed to transport cylinders. Never insert an object (e.g., wrench, screwdriver, pry bar) into cap openings; doing so may damage the valve and cause a leak. Use an adjustable strap wrench to remove overtight or rusted caps. Slowly open the valve. If the valve is hard to open, discontinue use and contact your supplier. Close the container valve after each use; keep closed even when empty. Never apply flame or localized heat directly to any part of the container. High temperatures may damage the container and could cause the pressure relief device to fail prematurely, venting the container contents. For other precautions in using this product, see section 16.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Store only where temperature will not exceed 125°F (52°C). Post "No Smoking or Open Flames" signs in storage and use areas. There must be no sources of ignition. Separate packages and protect against potential fire and/or explosion damage following appropriate codes and requirements (e.g., NFPA 30, NFPA 55, NFPA 70, and/or NFPA 221 in the U.S.) or according to requirements determined by the Authority Having Jurisdiction (AHJ). Always secure containers upright to keep them from falling or being knocked over. Install vapor protection cap, if provided, firmly in place by hand when the container is not in use. Store full and empty containers separately. Use a first-in, first-out inventory system to prevent storing full containers for long periods. For other precautions in using this product, see section 16.

OTHER PRECAUTIONS FOR HANDLING, STORAGE, AND USE: When handling product under pressure, use piping and equipment adequately designed to withstand the pressures to be encountered. Never work on a pressurized system. Use a back flow preventive device in the piping. Gases can cause rapid suffocation because of oxygen deficiency; store and use with adequate ventilation. If a leak occurs, close the container valve and blow down the system in a safe and environmentally correct manner in compliance with all international, federal/national, state/provincial, and local laws; then repair the leak. Never place a container where it may become part of an electrical circuit.

7.3. Specific end use(s)

None.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

<table>
<thead>
<tr>
<th>Hydrogen Sulfide (7783-06-4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACGIH ACGIH TLV-TWA (ppm)</td>
</tr>
<tr>
<td>ACGIH ACGIH TLV-STEL (ppm)</td>
</tr>
<tr>
<td>USA OSHA OSHA PEL (Ceiling) (ppm)</td>
</tr>
</tbody>
</table>

8.2. Exposure controls

Appropriate engineering controls: Use corrosion-resistant equipment. Use an explosion-proof local exhaust system. Local exhaust and general ventilation must be adequate to meet exposure standards. MECHANICAL (GENERAL): Inadequate - Use only in a closed system. Use explosion proof equipment and lighting.

Eye protection: Wear safety glasses when handling cylinders; vapor-proof goggles and a face shield during cylinder changeout or whenever contact with product is possible. Select eye protection in accordance with OSHA 29 CFR 1910.133.
Skin and body protection: Wear metatarsal shoes and work gloves for cylinder handling, and protective clothing where needed. Wear appropriate chemical gloves (e.g., neoprene, nitrile, etc.) during cylinder changeout or wherever contact with product is possible. Select per OSHA 29 CFR 1910.132, 1910.136, and 1910.138.

Respiratory protection: When workplace conditions warrant respirator use, follow a respiratory protection program that meets OSHA 29 CFR 1910.134, ANSI Z88.2, or MSHA 30 CFR 72.710 (where applicable). Use an air-supplied or air-purifying cartridge if the action level is exceeded. Ensure that the respirator has the appropriate protection factor for the exposure level. If cartridge type respirators are used, the cartridge must be appropriate for the chemical exposure (e.g., an organic vapor cartridge). For emergencies or instances with unknown exposure levels, use a self-contained breathing apparatus (SCBA).

Thermal hazard protection: Wear cold insulating gloves when transfilling or breaking transfer connections. Standard EN 511 - Cold insulating gloves. None necessary.

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>Gas</td>
</tr>
<tr>
<td>Appearance</td>
<td>Colorless gas. Colorless liquid at low temperature or under high pressure.</td>
</tr>
<tr>
<td>Molecular mass</td>
<td>34 g/mol</td>
</tr>
<tr>
<td>Color</td>
<td>Colorless</td>
</tr>
<tr>
<td>Odor</td>
<td>Odor can persist. Poor warning properties at low concentrations. Rotten eggs.</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>Odor threshold is subjective and inadequate to warn for overexposure.</td>
</tr>
<tr>
<td>pH</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Relative evaporation rate (butyl acetate=1)</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative evaporation rate (ether=1)</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Melting point</td>
<td>-86 °C</td>
</tr>
<tr>
<td>Freezing point</td>
<td>No data available</td>
</tr>
<tr>
<td>Boiling point</td>
<td>-60.3 °C</td>
</tr>
<tr>
<td>Flash point</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Critical temperature</td>
<td>100.4 °C</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>260 °C</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>4.3 - 46 vol %</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>1880 kPa</td>
</tr>
<tr>
<td>Critical pressure</td>
<td>8940 kPa</td>
</tr>
<tr>
<td>Relative vapor density at 20 °C</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative density</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative gas density</td>
<td>1.2</td>
</tr>
<tr>
<td>Solubility</td>
<td>Water: 3980 mg/l</td>
</tr>
<tr>
<td>Log Pow</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Log Kow</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Viscosity, kinematic</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Viscosity, dynamic</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Oxidizing properties</td>
<td>None.</td>
</tr>
<tr>
<td>Explosion limits</td>
<td>No data available</td>
</tr>
</tbody>
</table>

9.2. Other information

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gas group</td>
<td>Liquefied gas</td>
</tr>
<tr>
<td>Additional information</td>
<td>Gas/vapor heavier than air. May accumulate in confined spaces, particularly at or below ground level.</td>
</tr>
</tbody>
</table>
SECTION 10: Stability and reactivity

10.1. Reactivity

No reactivity hazard other than the effects described in sub-sections below.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

May react violently with oxidants. Can form explosive mixture with air.

10.4. Conditions to avoid

Avoid moisture in installation systems. Keep away from heat/sparks/open flames/hot surfaces. – No smoking.

10.5. Incompatible materials


10.6. Hazardous decomposition products

Thermal decomposition may produce: Sulfur. Hydrogen.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

Inhalation: gas: FATAL IF INHALED.

<table>
<thead>
<tr>
<th>Hydrogen Sulfide (7783-06-4)</th>
<th>LC50 inhalation rat (mg/l)</th>
<th>0.99 mg/l (Exposure time: 1 h)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LC50 inhalation rat (ppm)</td>
<td>356 ppm/4h</td>
<td></td>
</tr>
<tr>
<td>ATE US (gases)</td>
<td>356.000 ppmV/4h</td>
<td></td>
</tr>
<tr>
<td>ATE US (vapors)</td>
<td>0.990 mg/l/4h</td>
<td></td>
</tr>
<tr>
<td>ATE US (dust, mist)</td>
<td>0.990 mg/l/4h</td>
<td></td>
</tr>
</tbody>
</table>

Skin corrosion/irritation

Not classified

pH: Not applicable.

Serious eye damage/irritation

Not classified

pH: Not applicable.

Respiratory or skin sensitization

Not classified

Germ cell mutagenicity

Not classified

Carcinogenicity

Not classified

Reproductive toxicity

Not classified

Specific target organ toxicity (single exposure)

MAY CAUSE RESPIRATORY IRRITATION.

Specific target organ toxicity (repeated exposure)

Not classified

Aspiration hazard

Not classified

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general

VERY TOXIC TO AQUATIC LIFE.

<table>
<thead>
<tr>
<th>Hydrogen Sulfide (7783-06-4)</th>
<th>LC50 fish 1</th>
<th>0.0448 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [flow-through])</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>LC50 fish 2</td>
<td>0.016 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])</td>
</tr>
</tbody>
</table>
## 12.2. Persistence and degradability

<table>
<thead>
<tr>
<th>Hydrogen Sulfide (7783-06-4)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Persistence and degradability</td>
<td>Not applicable for inorganic gases.</td>
</tr>
</tbody>
</table>

## 12.3. Bioaccumulative potential

<table>
<thead>
<tr>
<th>Hydrogen Sulfide (7783-06-4)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>BCF fish 1</td>
<td>(no bioaccumulation expected)</td>
</tr>
<tr>
<td>Log Pow</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Log Kow</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Bioaccumulative potential</td>
<td>No data available.</td>
</tr>
</tbody>
</table>

## 12.4. Mobility in soil

<table>
<thead>
<tr>
<th>Hydrogen Sulfide (7783-06-4)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Mobility in soil</td>
<td>No data available.</td>
</tr>
<tr>
<td>Ecology - soil</td>
<td>Because of its high volatility, the product is unlikely to cause ground or water pollution.</td>
</tr>
</tbody>
</table>

## 12.5. Other adverse effects

<table>
<thead>
<tr>
<th>Other adverse effects</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Other adverse effects</td>
<td>May cause pH changes in aqueous ecological systems.</td>
</tr>
<tr>
<td>Effect on ozone layer</td>
<td>None.</td>
</tr>
<tr>
<td>Effect on the global warming</td>
<td>No known effects from this product.</td>
</tr>
</tbody>
</table>

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods


- **Waste disposal recommendations**: Do not attempt to dispose of residual or unused quantities. Return container to supplier.

## SECTION 14: Transport information

- **In accordance with DOT**
- **Transport document description**: UN1053 Hydrogen sulfide, 2.3
- **UN-No.(DOT)**: UN1053
- **Proper Shipping Name (DOT)**: Hydrogen sulfide
- **Department of Transportation (DOT) Hazard Classes**: 2.3 - Class 2.3 - Poisonous gas 49 CFR 173.115
- **Hazard labels (DOT)**: 2.3 - Poison gas
  - 2.1 - Flammable gas

- **DOT Special Provisions (49 CFR 172.102)**: 2 - This material is poisonous by inhalation (see 171.8 of this subchapter) in Hazard Zone B (see 173.116(a) or 173.133(a) of this subchapter), and must be described as an inhalation hazard under the provisions of this subchapter.
  - B9 - Bottom outlets are not authorized.
  - B14 - Each bulk packaging, except a tank car or a multi-unit-tank car tank, must be insulated with an insulating material so that the overall thermal conductance at 15.5 C (60 F) is no more than 1.5333 kilojoules per hour per square meter per degree Celsius (0.075 Btu per hour per square foot per degree Fahrenheit) temperature differential. Insulating materials must not promote corrosion to steel when wet.
  - N89 - When steel UN pressure receptacles are used, only those bearing the “H” mark are authorized.

## Additional information

- **Emergency Response Guide (ERG) Number**: 117
### Hydrogen Sulfide

**Safety Data Sheet P-4611**


**Date of issue**: 01/01/1979  
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**Other information**: No supplementary information available.

**Special transport precautions**: Avoid transport on vehicles where the load space is not separated from the driver’s compartment. Ensure vehicle driver is aware of the potential hazards of the load and knows what to do in the event of an accident or an emergency. Before transporting product containers:
- Ensure there is adequate ventilation.
- Ensure that containers are firmly secured.
- Ensure cylinder valve is closed and not leaking.
- Ensure valve outlet cap nut or plug (where provided) is correctly fitted.
- Ensure valve protection device (where provided) is correctly fitted.

**Transport by sea**

- **UN-No. (IMDG)**: 1053
- **Proper Shipping Name (IMDG)**: HYDROGEN SULPHIDE
- **Class (IMDG)**: 2 - Gases
- **MFAG-No**: 117

**Air transport**

- **UN-No. (IATA)**: 1053
- **Proper Shipping Name (IATA)**: Hydrogen sulphide
- **Class (IATA)**: 2
- **Civil Aeronautics Law**: Gases under pressure/Gases toxic under pressure

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**SECTION 15: Regulatory information**

**15.1. US Federal regulations**

<table>
<thead>
<tr>
<th>Hydrogen Sulfide (7783-06-4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Listed on the United States TSCA (Toxic Substances Control Act) inventory</td>
</tr>
<tr>
<td>Listed on the United States SARA Section 302</td>
</tr>
<tr>
<td>Listed on United States SARA Section 313</td>
</tr>
</tbody>
</table>

**SARA Section 302 Threshold Planning Quantity (TPQ)**: 500

**SARA Section 311/312 Hazard Classes**:
- Sudden release of pressure hazard
- Immediate (acute) health hazard
- Fire hazard
- Delayed (chronic) health hazard

**SARA Section 313 - Emission Reporting**: 1.0 %

**15.2. International regulations**

**CANADA**

<table>
<thead>
<tr>
<th>Hydrogen Sulfide (7783-06-4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Listed on the Canadian DSL (Domestic Substances List)</td>
</tr>
</tbody>
</table>

**EU-Regulations**

<table>
<thead>
<tr>
<th>Hydrogen Sulfide (7783-06-4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)</td>
</tr>
</tbody>
</table>

**15.2.2. National regulations**

<table>
<thead>
<tr>
<th>Hydrogen Sulfide (7783-06-4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Listed on the AICS (Australian Inventory of Chemical Substances)</td>
</tr>
<tr>
<td>Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)</td>
</tr>
<tr>
<td>Listed on the Japanese ENCS (Existing &amp; New Chemical Substances) inventory</td>
</tr>
<tr>
<td>Listed on the Korean ECL (Existing Chemicals List)</td>
</tr>
<tr>
<td>Listed on NZIoC (New Zealand Inventory of Chemicals)</td>
</tr>
<tr>
<td>Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)</td>
</tr>
<tr>
<td>Listed on the Canadian IDL (Ingredient Disclosure List)</td>
</tr>
</tbody>
</table>

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15.3. US State regulations

<table>
<thead>
<tr>
<th>Hydrogen Sulfide(7783-06-4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S. - California - Proposition 65 - Carcinogens List</td>
</tr>
<tr>
<td>U.S. - California - Proposition 65 - Developmental Toxicity</td>
</tr>
<tr>
<td>U.S. - California - Proposition 65 - Reproductive Toxicity - Female</td>
</tr>
<tr>
<td>U.S. - California - Proposition 65 - Reproductive Toxicity - Male</td>
</tr>
<tr>
<td>State or local regulations</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

SECTION 16: Other information

Revision date: 3/20/2015 12:00:00 AM
Other information:

When you mix two or more chemicals, you can create additional, unexpected hazards. Obtain and evaluate the safety information for each component before you produce the mixture. Consult an industrial hygienist or other trained person when you evaluate the end product. Before using any plastics, confirm their compatibility with this product.

Praxair asks users of this product to study this SDS and become aware of the product hazards and safety information. To promote safe use of this product, a user should (1) notify employees, agents, and contractors of the information in this SDS and of any other known product hazards and safety information, (2) furnish this information to each purchaser of the product, and (3) ask each purchaser to notify its employees and customers of the product hazards and safety information.

The opinions expressed herein are those of qualified experts within Praxair, Inc. We believe that the information contained herein is current as of the date of this Safety Data Sheet. Since the use of this information and the conditions of use are not within the control of Praxair, Inc., it is the user's obligation to determine the conditions of safe use of the product.

Praxair SDSs are furnished on sale or delivery by Praxair or the independent distributors and suppliers who package and sell our products. To obtain current SDSs for these products, contact your Praxair sales representative, local distributor, or supplier, or download from www.praxair.com. If you have questions regarding Praxair SDSs, would like the document number and date of the latest SDS, or would like the names of the Praxair suppliers in your area, phone or write the Praxair Call Center (Phone: 1-800-PRAXAIR/1-800-772-9247; Address: Praxair Call Center, Praxair, Inc., P.O. Box 44, Tonawanda, NY 14151-0044).

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NFPA health hazard: 4 - Very short exposure could cause death or serious residual injury even though prompt medical attention was given.

NFPA fire hazard: 4 - Will rapidly or completely vaporize at normal pressure and temperature, or is readily dispersed in air and will burn readily.

NFPA reactivity: 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.
Hydrogen Sulfide
Safety Data Sheet P-4611
Date of issue: 01/01/1979    Revision date: 03/20/2015    Supersedes: 06/01/2014

HMIS III Rating
Health: 2 Moderate Hazard - Temporary or minor injury may occur
Flammability: 4 Severe Hazard
Physical: 2 Moderate Hazard

SDS US (GHS HazCom 2012) - Praxair

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.