

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Date of issue: 06/10/2015 Version: 2.0

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form : Mixture

Product name : Carbonyl Sulfide (0.00001% - 4.24%), Ethylene (0.00001% - 19.99%), Hydrogen Sulfide

(0.00001% - 0.99%) in Methane

Product code : SG-2004-02031

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : Test gas/Calibration gas.

1.3. Details of the supplier of the safety data sheet

Air Liquide 2700 Post Oak Boulevard Houston, TX 77056 - USA T 1-800-819-1704 www.us.airliquide.com

1.4. Emergency telephone number

Emergency number : CHEMTREC: 1-800-424-9300

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GHS-US classification

Flam. Gas 1 H220 Compressed gas H280

Full text of H-phrases: see section 16

2.2. Label elements

GHS-US labeling

Hazard pictograms (GHS-US)





S02 GF

Signal word (GHS-US) : Danger

Hazard statements (GHS-US) : H220 - Extremely flammable gas

H280 - Contains gas under pressure; may explode if heated OSHA-H01 - May displace oxygen and cause rapid suffocation

CGA-HG04 - May form explosive mixtures with air

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, hot surfaces, open flames, sparks. - No smoking

P271 - Use only outdoors or in a well-ventilated area

P280 - Wear eye protection, face protection, protective gloves, protective clothing P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing

P308+P313 - If exposed or concerned: Get medical advice/attention

P377 - Leaking gas fire: Do not extinguish, unless leak can be stopped safely

P381 - Eliminate all ignition sources if safe to do so

P403 - Store in a well-ventilated place

 $P501-Dispose \ of \ contents/container \ in \ accordance \ with \ local/regional/national/international$

regulations

CGA-PG02 - Protect from sunlight when ambient temperature exceeds 52°C (125°F)

CGA-PG05 - Use a back flow preventive device in the piping CGA-PG06 - Close valve after each use and when empty CGA-PG10 - Use only with equipment rated for cylinder pressure

CGA-PG14 - Approach suspected leak area with caution CGA-PG21 - Open valve slowly

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CGA-PG29 - Do not depend on odor to detect presence of gas

2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

| Name | Product identifier | % | GHS-US classification |
|------------------|--------------------|---------------------|--|
| Methane | (CAS No) 74-82-8 | 74.78 - 99.99997 | Flam. Gas 1, H220 Compressed gas, H280 |
| Ethylene | (CAS No) 74-85-1 | 0.00001 - 19.99 | Flam. Gas 1, H220 Liquefied gas, H280 STOT SE 3, H336 |
| Carbonyl sulfide | (CAS No) 463-58-1 | 0.00001 - 4.24 | Flam. Gas 1, H220 Liquefied gas, H280 Acute Tox. 3 (Inhalation:gas), H331 |
| Hydrogen sulfide | (CAS No) 7783-06-4 | 0.00001 - 0.99 | Flam. Gas 1, H220 Liquefied gas, H280 Acute Tox. 2 (Inhalation:gas), H330 STOT SE 3, H335 Aquatic Acute 1, H400 |

Full text of H-phrases: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures after inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If you feel

unwell, seek medical advice.

First-aid measures after skin contact : Adverse effects not expected from this product. First-aid measures after eye contact : Adverse effects not expected from this product.

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

Symptoms/injuries after inhalation : May displace oxygen and cause rapid suffocation. Symptoms/injuries after skin contact : Adverse effects not expected from this product. Symptoms/injuries after eye contact : Adverse effects not expected from this product.

Symptoms/injuries after ingestion : Ingestion is not considered a potential route of exposure.

Symptoms/injuries upon intravenous

administration

: Not known.

Chronic symptoms : Adverse effects not expected from this product.

4.3. Indication of any immediate medical attention and special treatment needed

If you feel unwell, seek medical advice. If breathing is difficult, give oxygen.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Use extinguishing media appropriate for surrounding fire.

Unsuitable extinguishing media : Do not use water jet to extinguish.

5.2. Special hazards arising from the substance or mixture

Fire hazard : This product is flammable.

Explosion hazard : Heat may build pressure, rupturing closed containers, spreading fire and increasing risk of

burns and injuries. May form flammable/explosive vapor-air mixture.

Reactivity : None known

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5.3. Advice for firefighters

Firefighting instructions : In case of fire: Evacuate area. Fight fire remotely due to the risk of explosion. Use water spray

or fog for cooling exposed containers. Exercise caution when fighting any chemical fire.

Protection during firefighting : Standard protective clothing and equipment (e.g., Self Contained Breathing Apparatus) for fire

fighters. Do not enter fire area without proper protective equipment, including respiratory

protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Ensure adequate ventilation.

6.1.1. For non-emergency personnel

Protective equipment : Wear protective equipment consistent with the site emergency plan.

Emergency procedures : Escape the danger area by the closest safe route. Close doors and windows of adjacent

premises. Keep containers closed. Mark the danger area. Seal off low-lying areas. Keep

upwind.

6.1.2. For emergency responders

Protective equipment : Standard protective clothing and equipment (e.g., Self Contained Breathing Apparatus) for fire

fighters. Equip cleanup crew with proper protection.

Emergency procedures : Evacuate and limit access. Ventilate area. Remove ignition sources. Monitor concentration of released product. Consider the risk of potentially explosive atmospheres. Wear self-contained

released product. Consider the risk of potentially explosive atmospheres. Wear self-contained breathing apparatus when entering atmospheres of unknown contaminant concentration until

proven to be safe.

6.2. Environmental precautions

Try to stop release if safe to do so.

6.3. Methods and material for containment and cleaning up

For containment : Try to stop release if safe to do so.

Methods for cleaning up : Dispose of this material and its container in accordance with local regulations.

6.4. Reference to other sections

See also Sections 8 and 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed : Pressurized container: Do not pierce or burn, even after use. Use equipment rated for cylinder

pressure. Close valve after each use and when empty. Handle empty containers with care because residual vapors are flammable. In use, may form flammable vapor-air mixture.

Precautions for safe handling : Do not handle until all safety precautions have been read and understood. Use only outdoors or in a well vertilated area. Keep away from heat(sparks/open flames/het surfaces. No smeking

in a well-ventilated area. Keep away from heat/sparks/open flames/hot surfaces. – No smoking. Use only non-sparking tools.

: Do not eat, drink or smoke when using this product.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Comply with applicable regulations. Proper grounding procedures to avoid static electricity

should be followed.

Storage conditions : Do not expose to temperatures exceeding 52°C (125°F). Keep container closed when not in

use. Protect cylinder from physical damage. Store in well ventilated area.

Incompatible products : None known.

Incompatible materials : Oxidizing materials. Air.

7.3. Specific end use(s)

See Section 1.2.

Hygiene measures

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

| Carbonyl Sulfide (0.00001% - 4.24%), Ethylene (0.00001% - 19.99%), Hydrogen Sulfide (0.00001% - 0.99%) in Methane | |
|---|----------------|
| ACGIH | Not applicable |
| OSHA | Not applicable |

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| Carbonyl sulfide (463-58-1) | | | | |
|------------------------------|--------------------------|----------|--|--|
| ACGIH | ACGIH TWA (ppm) | 5 ppm | | |
| OSHA | Not applicable | | | |
| Ethylene (74-85-1) | Ethylene (74-85-1) | | | |
| ACGIH | ACGIH TWA (ppm) | 200 ppm | | |
| OSHA | Not applicable | | | |
| Hydrogen sulfide (7783-06-4) | | | | |
| ACGIH | ACGIH TWA (ppm) | 1 ppm | | |
| ACGIH | ACGIH STEL (ppm) | 5 ppm | | |
| OSHA | OSHA PEL (Ceiling) (ppm) | 20 ppm | | |
| Methane (74-82-8) | | | | |
| ACGIH | ACGIH TWA (ppm) | 1000 ppm | | |
| OSHA | Not applicable | ' | | |

Exposure controls

Appropriate engineering controls : Ensure exposure is below occupational exposure limits. Provide adequate general and local

exhaust ventilation. Systems under pressure should be regularly checked for leakages. Oxygen detectors should be used when asphyxiating gases may be released. Consider work permit

system e.g. for maintenance activities.

Hand protection Wear working gloves when handling gas containers. 29 CFR 1910.138: Hand Protection.

Eye protection Wear safety glasses with side shields. 29 CFR 1910.133: Eye and Face Protection. Skin and body protection Wear suitable protective clothing, e.g. - lab coats, coveralls or flame resistant clothing.

None necessary during normal and routine operations. See Sections 5 & 6.

Respiratory protection Thermal hazard protection None necessary during normal and routine operations.

Refer to local regulations for restriction of emissions to the atmosphere. See section 13 for Environmental exposure controls

specific methods for waste gas treatment.

: Wear safety shoes while handling containers. 29 CFR 1910.136: Foot Protection. Other information

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Physical state : Gas

Appearance Clear, colorless gas.

Color Colorless

Odor Sulfide-like stench Rotten eggs

Odor threshold No data available pН No data available : No data available Melting point Freezing point No data available Boiling point No data available Flash point No data available Relative evaporation rate (butyl acetate=1) : No data available Flammability (solid, gas) : See Section 2.1 and 2.2 **Explosion limits** No data available

Explosive properties Without adequate ventilation formation of explosive mixtures may be possible.

Oxidizing properties

Vapor pressure : No data available : No data available Relative density Relative vapor density at 20 °C No data available

Molecular mass : Not applicable for gas-mixtures.

Relative gas density : Lighter or similar to air

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Solubility : No data available Log Pow : No data available Log Kow : No data available Auto-ignition temperature : No data available Decomposition temperature : No data available Viscosity : No data available : No data available Viscosity, kinematic Viscosity, dynamic : No data available

Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

None known.

Chemical stability

Stable under normal conditions.

Possibility of hazardous reactions

Can form explosive mixture with air.

Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

Oxidizing materials. Air.

Hazardous decomposition products

Under normal conditions of storage and use hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity : Not classified

| Addic toxidity | . Not diagnifed | |
|-----------------------------------|--------------------------------|--|
| Carbonyl sulfide (463-58-1) | | |
| LC50 inhalation rat (ppm) | 850 ppm/4h | |
| ATE US (gases) | 850.000 ppmV/4h | |
| Ethylene (74-85-1) | | |
| LC50 inhalation rat (ppm) | 820000 ppm/4h | |
| ATE US (gases) | 820000.000 ppmV/4h | |
| Hydrogen sulfide (7783-06-4) | | |
| LC50 inhalation rat (mg/l) | 0.99 mg/l (Exposure time: 1 h) | |
| LC50 inhalation rat (ppm) | 356 ppm/4h | |
| Methane (74-82-8) | | |
| LC50 inhalation rat (ppm) | 820000 ppm/4h | |
| ATE US (gases) | 820000.000 ppmV/4h | |
| Skin corrosion/irritation | : Not classified | |
| Serious eye damage/irritation | : Not classified | |
| Respiratory or skin sensitization | : Not classified | |
| Germ cell mutagenicity | : Not classified | |
| Carcinogenicity | : Not classified | |
| Ethylene (74-85-1) | | |
| IARC group | 3 - Not classifiable | |
| Reproductive toxicity | : Not classified | |

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Specific target organ toxicity (single exposure) : Not classified

Specific target organ toxicity (repeated

exposure)

: Not classified

Aspiration hazard : Not classified

Symptoms/injuries after inhalation : May displace oxygen and cause rapid suffocation.

Symptoms/injuries after skin contact : Adverse effects not expected from this product.

Symptoms/injuries after eye contact : Adverse effects not expected from this product.

Symptoms/injuries after ingestion : Ingestion is not considered a potential route of exposure.

Symptoms/injuries upon intravenous : Not known.

administration

: Adverse effects not expected from this product.

SECTION 12: Ecological information

12.1. Toxicity

Chronic symptoms

| Hydrogen sulfide (7783-06-4) | |
|------------------------------|---|
| LC50 fish 1 | 0.0448 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [flow-through]) |
| EC50 Daphnia 1 | 0.022 mg/l (Exposure time: 96 h - Species: Gammarus pseudolimnaeus) |
| LC50 fish 2 | 0.016 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through]) |

12.2. Persistence and degradability

| Carbonyl sulfide (463-58-1) | |
|-------------------------------|---|
| Persistence and degradability | Not applicable for inorganic gases. |
| Ethylene (74-85-1) | |
| Persistence and degradability | The substance is biodegradable. Unlikely to persist. |
| Hydrogen sulfide (7783-06-4) | |
| Persistence and degradability | Not applicable for inorganic gases. |
| Methane (74-82-8) | |
| Persistence and degradability | The substance is biodegradable. Unlikely to persist. No data available. |

12.3. Bioaccumulative potential

| Carbonyl sulfide (463-58-1) | | | |
|------------------------------|---|--|--|
| Log Pow | Not applicable for inorganic gases. | | |
| Bioaccumulative potential | No data available. | | |
| Ethylene (74-85-1) | | | |
| BCF fish 1 | 4 - 4.6 | | |
| Log Pow | 1.13 | | |
| Bioaccumulative potential | Not expected to bioaccumulate due to the low log Kow (log Kow < 4). Refer to section 9. | | |
| Hydrogen sulfide (7783-06-4) | | | |
| BCF fish 1 | (no bioaccumulation expected) | | |
| Log Pow | Not applicable for inorganic gases. | | |
| Bioaccumulative potential | No data available. | | |
| Methane (74-82-8) | | | |
| Log Pow | Not applicable for gas mixtures | | |
| Log Kow | Not applicable for gas mixtures | | |
| Bioaccumulative potential | Not expected to bioaccumulate due to the low log Kow (log Kow < 4). Refer to section 9. | | |

12.4. Mobility in soil

| Carbonyl sulfide (463-58-1) | |
|-----------------------------|---|
| Ecology - soil | Because of its high volatility, the product is unlikely to cause ground or water pollution. |

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| Ethylene (74-85-1) | | |
|---|---|--|
| Ecology - soil Because of its high volatility, the product is unlikely to cause ground or water pollution | | |
| Hydrogen sulfide (7783-06-4) | | |
| Ecology - soil | Because of its high volatility, the product is unlikely to cause ground or water pollution. | |
| Methane (74-82-8) | | |
| Mobility in soil | No data available. | |
| Ecology - soil | Because of its high volatility, the product is unlikely to cause ground or water pollution. | |

12.5. Other adverse effects

Effect on ozone layer : No known effects from this product.

Effect on the global warming : Contains greenhouse gas(es) not covered by 842/2006/EC.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods : Contact supplier if guidance is required. Do not discharge into any place where its

accumulation could be dangerous. Ensure that the emission levels from local regulations or operating permits are not exceeded. Waste gas should be flared through a suitable burner with flash back arrestor. Do not discharge into areas where there is a risk of forming an explosive

mixture with air.

Waste disposal recommendations : Refer to the CGA Pamphlet P-63 "Disposal of Gases" available at www.cganet.com for more

guidance on suitable disposal methods.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

Transport document description : UN1954 Compressed gas, flammable, n.o.s.

UN-No.(DOT) : UN1954

Proper Shipping Name (DOT) : Compressed gas, flammable, n.o.s.

Hazard labels (DOT) : 2.1 - Flammable gas



DOT Packaging Non Bulk (49 CFR 173.xxx) : 302;305
DOT Packaging Bulk (49 CFR 173.xxx) : 314;315

DOT Symbols : G - Identifies PSN requiring a technical name

DOT Packaging Exceptions (49 CFR 173.xxx) : 306

DOT Quantity Limitations Passenger aircraft/rail : Forbidden

(49 CFR 173.27)

DOT Quantity Limitations Cargo aircraft only (49 : 150 kg

CFR 175.75)

DOT Vessel Stowage Location : D - The material must be stowed "on deck only" on a cargo vessel and on a passenger vessel

carrying a number of passengers limited to not more than the larger of 25 passengers or one passenger per each 3 m of overall vessel length, but the material is prohibited on passenger

vessels in which the limiting number of passengers is exceeded.

DOT Vessel Stowage Other : 40 - Stow "clear of living quarters"

Additional information

Other information : No supplementary information available.

ADR

Transport document description : UN 1954 (Carbonyl sulfide), 2.1, (B/D)

Class (ADR) : 2 - Gases

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Hazard identification number (Kemler No.) : 23 Classification code (ADR) : 1F

Hazard labels (ADR) : 2.1 - Flammable gases



Orange plates

1954

Tunnel restriction code (ADR) : B/D Limited quantities (ADR) : 0 Excepted quantities (ADR) : E0

Transport by sea

UN-No. (IMDG) : 1954

Proper Shipping Name (IMDG) : COMPRESSED GAS, FLAMMABLE, N.O.S.

Class (IMDG) : 2 - Gases

Air transport

UN-No. (IATA) : 1954

Proper Shipping Name (IATA) : COMPRESSED GAS, FLAMMABLE, N.O.S.

Class (IATA)

SECTION 15: Regulatory information

SARA Section 313 - Emission Reporting

15.1. US Federal regulations Carbanyl sulfide (462 EQ 4)

| Carbonyi Sumae (463-56-1) |
|---|
| Listed on the United States TSCA (Toxic Substances Control Act) inventory |
| Subject to reporting requirements of United States SARA Section 313 |

Ethylene (74-85-1)

Listed on the United States TSCA (Toxic Substances Control Act) inventory Subject to reporting requirements of United States SARA Section 313

SARA Section 313 - Emission Reporting

Hydrogen sulfide (7783-06-4)

Listed on the United States TSCA (Toxic Substances Control Act) inventory Listed on the United States SARA Section 302

Subject to reporting requirements of United States SARA Section 313

SARA Section 302 Threshold Planning 500 Quantity (TPQ) SARA Section 313 - Emission Reporting

1.0 %

1.0 %

Methane (74-82-8)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

15.2. International regulations

CANADA

Carbonyl sulfide (463-58-1)

Listed on the Canadian DSL (Domestic Sustances List)

Ethylene (74-85-1)

Listed on the Canadian DSL (Domestic Sustances List)

WHMIS Classification Class A - Compressed Gas Class B Division 1 - Flammable Gas

Class D Division 2 Subdivision B - Toxic material causing other toxic effects

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| Hydrogen sulfide (7783-06-4) | |
|--|--|
| Listed on the Canadian DSL (Domestic Sustances List) | |
| WHMIS Classification | Class A - Compressed Gas Class B Division 1 - Flammable Gas Class D Division 1 Subdivision A - Very toxic material causing immediate and serious toxic effects Class D Division 2 Subdivision B - Toxic material causing other toxic effects |
| Methane (74-82-8) | |
| Listed on the Canadian DSL (Domestic | Sustances List) |
| WHMIS Classification | Class A - Compressed Gas Class B Division 1 - Flammable Gas |

EU-Regulations

Carbonyl sulfide (463-58-1)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

Ethylene (74-85-1)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

Hydrogen sulfide (7783-06-4)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

Methane (74-82-8)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Not classified

Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

No additional information available

National regulations

Carbonyl sulfide (463-58-1)

Listed on the AICS (Australian Inventory of Chemical Substances)

Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory

Listed on the Korean ECL (Existing Chemicals List)

Listed on NZIoC (New Zealand Inventory of Chemicals)

Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)

Listed on the Canadian IDL (Ingredient Disclosure List)

Ethylene (74-85-1)

Listed on the AICS (Australian Inventory of Chemical Substances)

Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)

Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory

Listed on the Korean ECL (Existing Chemicals List)

Listed on NZIoC (New Zealand Inventory of Chemicals)

Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)

Hydrogen sulfide (7783-06-4)

Listed on the AICS (Australian Inventory of Chemical Substances)

Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)

Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory

Listed on the Korean ECL (Existing Chemicals List)

Listed on NZIoC (New Zealand Inventory of Chemicals)

Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)

Listed on the Canadian IDL (Ingredient Disclosure List)

Methane (74-82-8)

Listed on the AICS (Australian Inventory of Chemical Substances)

Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)

Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory

Listed on the Korean ECL (Existing Chemicals List)

Listed on NZIoC (New Zealand Inventory of Chemicals)

Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)

15.3. US State regulations

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Carbonyl sulfide (463-58-1)

- U.S. Massachusetts Right To Know List
- U.S. New Jersey Right to Know Hazardous Substance List
- U.S. Pennsylvania RTK (Right to Know) Environmental Hazard List
- U.S. Pennsylvania RTK (Right to Know) List

Ethylene (74-85-1)

- U.S. Massachusetts Right To Know List
- U.S. New Jersey Right to Know Hazardous Substance List
- U.S. Pennsylvania RTK (Right to Know) Environmental Hazard List
- U.S. Pennsylvania RTK (Right to Know) List

Hydrogen sulfide (7783-06-4)

- U.S. Massachusetts Right To Know List
- U.S. New Jersey Right to Know Hazardous Substance List
- U.S. Pennsylvania RTK (Right to Know) Environmental Hazard List
- U.S. Pennsylvania RTK (Right to Know) List

Methane (74-82-8)

- U.S. Massachusetts Right To Know List
- U.S. New Jersey Right to Know Hazardous Substance List
- U.S. Pennsylvania RTK (Right to Know) List

SECTION 16: Other information

| Indication of changes | Revised safety data sheet in accordance with OSHA final rule on GHS implementation | 1 |
|-----------------------|--|---|
| | promulanted March 26, 2012 | |

promulgated March 26, 2012.

: This Safety Data Sheet is offered pursuant to OSHA's Hazard Communication Standard, 29 CFR, 1910.1200. Other government regulations must be reviewed for applicability to this product.

Full text of H-phrases:

Other information

| At Of 11-prinases. | |
|-------------------------------|--|
| Acute Tox. 2 (Inhalation:gas) | Acute toxicity (inhalation:gas) Category 2 |
| Acute Tox. 3 (Inhalation:gas) | Acute toxicity (inhalation:gas) Category 3 |
| Aquatic Acute 1 | Hazardous to the aquatic environment - Acute Hazard Category 1 |
| Compressed gas | Gases under pressure Compressed gas |
| Flam. Gas 1 | Flammable gases Category 1 |
| Liquefied gas | Gases under pressure Liquefied gas |
| STOT SE 3 | Specific target organ toxicity (single exposure) Category 3 |
| STOT SE 3 | Specific target organ toxicity (single exposure) Category 3 |
| H220 | Extremely flammable gas |
| H280 | Contains gas under pressure; may explode if heated |
| H330 | Fatal if inhaled |
| H331 | Toxic if inhaled |
| H335 | May cause respiratory irritation |
| H336 | May cause drowsiness or dizziness |
| H400 | Very toxic to aquatic life |
| | |

SDS US (GHS HazCom 2012)

This Safety Data Sheet is offered pursuant to OSHA's Hazard Communication Standard, 29 CFR, 1910.1200. Other government regulations must be reviewed for applicability to this product. To the best of Air Liquide America Corporation's knowledge, the information contained herein is reliable and accurate as of this date; however, accuracy, suitability or completeness are not guaranteed and no warranties of any type, either express or implied, are provided. The information contained herein relates only to this specific product. If this product is combined with other materials, all component properties must be considered. Data may be changed from time to time. Be sure to consult the latest edition.

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