

# SAFETY DATA SHEET

RAW GAS, HIGH H2S



## Section 1. Identification

**Product name** : RAW GAS, HIGH H2S  
**Product description** : Hydrocarbon Gas  
**SDS #** : 4430

### Relevant identified uses of the substance or mixture and uses advised against

**Identified uses** : Raw material  
**Uses advised against** : This product is not recommended for any industrial, professional or consumer use other than the identified uses above.

**Supplier** : Imperial Oil - Crude Oil Supply & Marketing  
P.O. Box 2480, Station M  
Calgary, ALBERTA T2P 3M9 Canada

**24-Hour emergency telephone number** : 1-866-232-9563 / (800)424-9300 CHEMTREC

**Supplier General Contact** : 1-800-567-3776

**SDS Internet Address** : [www.sds.exxonmobil.com](http://www.sds.exxonmobil.com)

## Section 2. Hazard identification

This material is considered to be hazardous according to regulatory guidelines.

This product has been classified in accordance with hazard criteria of the Hazardous Products Regulations (HPR) SOR/2015-17 and the SDS contains all the information required by the HPR SOR/2015-17.

**Classification of the substance or mixture** : FLAMMABLE GASES - Category 1  
GASES UNDER PRESSURE - Compressed gas  
SIMPLE ASPHYXIANTS - Category 1  
ACUTE TOXICITY (inhalation) - Category 2  
GERM CELL MUTAGENICITY - Category 1B  
CARCINOGENICITY - Category 1B

### GHS label elements

**Hazard pictograms** :



**Signal word** : Danger

**Hazard statements** : H220 - Extremely flammable gas.  
H280 - Contains gas under pressure; may explode if heated.  
H330 - Fatal if inhaled.  
H340 - May cause genetic defects.  
H350 - May cause cancer.  
May displace oxygen and cause rapid suffocation.

### Precautionary statements

**Prevention** : P201 - Obtain special instructions before use.  
P202 - Do not handle until all safety precautions have been read and understood.  
P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
P260 - Do not breathe gas.  
P271 - Use only outdoors or in a well-ventilated area.  
P280 - Wear protective gloves, protective clothing and eye or face protection.  
P284 - In case of inadequate ventilation wear respiratory protection.

## Section 2. Hazard identification

<b>Response</b>	: P304 + P340, P310 - IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor. P308 + P313 - IF exposed or concerned: Get medical advice or attention. P377 - Leaking gas fire: Do not extinguish, unless leak can be stopped safely. P381 - In case of leakage, eliminate all ignition sources.
<b>Storage</b>	: P403 + P233 - Store in a well-ventilated place. Keep container tightly closed. P405 - Store locked up. P410 + P403 - Protect from sunlight.
<b>Disposal</b>	: P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
<b>Supplemental label elements</b>	: Keep container tightly closed. Use only with adequate ventilation. Do not enter storage areas and confined spaces unless adequately ventilated.
<b>Contains</b>	: gas, natural
<b>Note</b>	: This material should not be used for any other purpose than the intended use in Section 1 without expert advice. Health studies have shown that chemical exposure may cause potential human health risks which may vary from person to person.

## Section 3. Composition/information on ingredients

<b>Substance/mixture</b>	: Substance
<b>Chemical name</b>	: gas, natural

### CAS number/other identifiers

<b>CAS number</b>	: 68410-63-9
-------------------	--------------

<b>Ingredient name</b>	<b>% (v/v)</b>	<b>CAS number</b>
gas, natural	95	8006-14-2
methane	60 - 85	74-82-8
hydrogen sulfide	7 - 40	7783-06-4
ethane	10 - 30	74-84-0
propane	3 - 7	74-98-6
natural gas condensate (petroleum)	1 - 5	64741-47-5
carbon dioxide	1 - 5	124-38-9
benzene	0.1 - 1	71-43-2

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

## Section 4. First-aid measures

### Description of necessary first aid measures

<b>Eye contact</b>	: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.
--------------------	---

## Section 4. First-aid measures

- Inhalation** : Get medical attention immediately. Call a poison center or physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- Skin contact** : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. If burned by contact with hot material, molten material adhering to skin should be cooled as quickly as possible with water, and see a physician for removal of adhering material and treatment of burn. Wash clothing before reuse. Clean shoes thoroughly before reuse. To avoid the risk of static discharges and gas ignition, soak contaminated clothing thoroughly with water before removing it. Continue to rinse for at least 10 minutes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Get medical attention.
- Ingestion** : As this product is a gas, refer to the inhalation section.

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

#### Potential acute health effects

- Eye contact** : Contact with rapidly expanding gas may cause burns or frostbite.
- Inhalation** : Fatal if inhaled.
- Skin contact** : Causes mild skin irritation. Contact with rapidly expanding gas may cause burns or frostbite.
- Ingestion** : As this product is a gas, refer to the inhalation section.

#### Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following:  
pain or irritation  
watering  
redness
- Inhalation** : Respiratory and eye irritation, coughing, a sensation of dryness and pain in the nose, and loss of consciousness.
- Skin contact** : Adverse symptoms may include the following:  
irritation  
redness
- Ingestion** : No specific data.

### Indication of immediate medical attention and special treatment needed, if necessary

- Notes to physician** : This material, or a component, may be associated with cardiac sensitization following very high exposures (well above occupational exposure limits) or with concurrent exposure to high stress levels or heart-stimulating substances like epinephrine. Administration of such substances should be avoided.
- Specific treatments** : No specific treatment.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

## Section 5. Fire-fighting measures

### Extinguishing media

- Suitable extinguishing media** : Use water fog, dry chemical or carbon dioxide (CO<sub>2</sub>) to extinguish flames.
- Unsuitable extinguishing media** : Do not use water jet.

**Specific hazards arising from the chemical** : Contains gas under pressure. Extremely flammable gas. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. This material is toxic to aquatic life. This material is harmful to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

**Hazardous combustion products** : hydrogen sulfide, Incomplete combustion products, Oxides of carbon, Smoke, Fume

**Special protective actions for fire-fighters** : Use standard firefighting procedures and consider the hazards of other involved materials. Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. Contact supplier immediately for specialist advice. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool. Assure an extended cooling down period to prevent re-ignition. If involved in fire, shut off flow immediately if it can be done without risk. If this is impossible, withdraw from area and allow fire to burn. Fight fire from protected location or maximum possible distance. Eliminate all ignition sources if safe to do so. Prevent runoff from fire control or dilution from entering streams, sewers, or drinking water supply. No action shall be taken involving any personal risk or without suitable training.

**Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## Section 6. Accidental release measures

### NOTIFICATION PROCEDURES

In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations.

### Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Shut off all ignition sources. No flares, smoking or flames in hazard area. Put on appropriate personal protective equipment. Accidental releases pose a serious fire or explosion hazard. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Avoid breathing gas. Do not breathe gas.
- For emergency responders** : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

**Environmental precautions** : Ensure emergency procedures to deal with accidental gas releases are in place to avoid contamination of the environment. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities.

### Methods and materials for containment and cleaning up

- Small spill** : Immediately contact emergency personnel. Stop leak if without risk. Use spark-proof tools and explosion-proof equipment.
- Large spill** : Immediately contact emergency personnel. Stop leak if without risk. Use spark-proof tools and explosion-proof equipment. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.



## Section 8. Exposure controls/personal protection

hydrogen sulfide

**CA British Columbia Provincial (Canada, 6/2023).** Oxygen Depletion [Asphyxiant]. Explosive potential.

**CA Ontario Provincial (Canada, 6/2019).** Oxygen Depletion [Asphyxiant].

**CA Quebec Provincial (Canada, 6/2022).** Oxygen Depletion [Asphyxiant].

**CA Alberta Provincial (Canada, 6/2018).** [Aliphatic Hydrocarbon gases, Alkane (C2-C4)]

OEL: 1000 ppm 8 hours.

**ACGIH TLV (United States, 1/2023).** Oxygen Depletion [Asphyxiant]. Explosive potential.

**CA Saskatchewan Provincial (Canada, 7/2013).**

STEL: 15 ppm 15 minutes.

TWA: 10 ppm 8 hours.

**CA British Columbia Provincial (Canada, 6/2023).**

C: 10 ppm

**CA Ontario Provincial (Canada, 6/2019).**

TWA: 10 ppm 8 hours.

STEL: 15 ppm 15 minutes.

**CA Quebec Provincial (Canada, 6/2022).**

TWAEV: 8 ppm 8 hours.

STEV: 10 ppm 15 minutes.

**CA Alberta Provincial (Canada, 6/2018).**

C: 21 mg/m<sup>3</sup>

C: 15 ppm

OEL: 10 ppm 8 hours.

OEL: 14 mg/m<sup>3</sup> 8 hours.

**ACGIH TLV (United States, 1/2023).**

TWA: 1 ppm 8 hours.

STEL: 5 ppm 15 minutes.

**ExxonMobil (Company).**

STEL: 10 ppm 15 minutes.

STEL: 14 mg/m<sup>3</sup> 15 minutes.

TWA: 5 ppm 8 hours.

TWA: 7 mg/m<sup>3</sup> 8 hours.

ethane

**CA Saskatchewan Provincial (Canada, 7/2013).**

STEL: 1250 ppm 15 minutes.

TWA: 1000 ppm 8 hours.

**CA British Columbia Provincial (Canada, 6/2023).** Oxygen Depletion [Asphyxiant]. Explosive potential.

**CA Ontario Provincial (Canada, 6/2019).** Oxygen Depletion [Asphyxiant]. Explosive potential.

**CA Quebec Provincial (Canada, 6/2022).** Oxygen Depletion [Asphyxiant].

**CA Alberta Provincial (Canada, 6/2018).**

OEL: 1000 ppm 8 hours.

**ACGIH TLV (United States, 1/2023).** Oxygen Depletion [Asphyxiant]. Explosive potential.

**CA Saskatchewan Provincial (Canada, 7/2013).**

STEL: 1250 ppm 15 minutes.

TWA: 1000 ppm 8 hours.

**CA British Columbia Provincial (Canada, 6/2023).** Oxygen Depletion [Asphyxiant]. Explosive potential.

propane

**CA Ontario Provincial (Canada, 6/2019).** Oxygen Depletion

## Section 8. Exposure controls/personal protection

carbon dioxide

[Asphyxiant]. Explosive potential.

**CA Quebec Provincial (Canada, 6/2022).**

TWAEV: 1000 ppm 8 hours.

TWAEV: 1800 mg/m<sup>3</sup> 8 hours.

**CA Alberta Provincial (Canada, 6/2018).**

OEL: 1000 ppm 8 hours.

**ACGIH TLV (United States, 1/2023). Oxygen Depletion**

[Asphyxiant]. Explosive potential.

**CA Saskatchewan Provincial (Canada, 7/2013).**

STEL: 30000 ppm 15 minutes.

TWA: 5000 ppm 8 hours.

**CA British Columbia Provincial (Canada, 6/2023).**

TWA: 5000 ppm 8 hours.

STEL: 15000 ppm 15 minutes.

**CA Ontario Provincial (Canada, 6/2019).**

TWA: 5000 ppm 8 hours.

STEL: 30000 ppm 15 minutes.

**CA Quebec Provincial (Canada, 6/2022).**

TWAEV: 5000 ppm 8 hours.

TWAEV: 9000 mg/m<sup>3</sup> 8 hours.

STEV: 30000 ppm 15 minutes.

STEV: 54000 mg/m<sup>3</sup> 15 minutes.

**CA Alberta Provincial (Canada, 6/2018).**

OEL: 54000 mg/m<sup>3</sup> 15 minutes.

OEL: 5000 ppm 8 hours.

OEL: 30000 ppm 15 minutes.

OEL: 9000 mg/m<sup>3</sup> 8 hours.

**ACGIH TLV (United States, 1/2023).**

TWA: 5000 ppm 8 hours.

TWA: 9000 mg/m<sup>3</sup> 8 hours.

STEL: 30000 ppm 15 minutes.

STEL: 54000 mg/m<sup>3</sup> 15 minutes.

benzene

**CA British Columbia Provincial (Canada, 6/2023). Absorbed through skin.**

TWA: 0.5 ppm 8 hours.

STEL: 2.5 ppm 15 minutes.

**CA Ontario Provincial (Canada, 6/2019). Absorbed through skin.**

TWA: 0.5 ppm 8 hours.

STEL: 2.5 ppm 15 minutes.

**CA Quebec Provincial (Canada, 6/2022). Absorbed through skin.**

TWAEV: 0.5 ppm 8 hours.

STEV: 2.5 ppm 15 minutes.

**CA Alberta Provincial (Canada, 6/2018). Absorbed through skin.**

OEL: 1.6 mg/m<sup>3</sup> 8 hours.

OEL: 2.5 ppm 15 minutes.

OEL: 8 mg/m<sup>3</sup> 15 minutes.

OEL: 0.5 ppm 8 hours.

**ACGIH TLV (United States, 1/2023). Absorbed through skin.**

TWA: 0.5 ppm 8 hours.

TWA: 1.6 mg/m<sup>3</sup> 8 hours.

STEL: 2.5 ppm 15 minutes.

STEL: 8 mg/m<sup>3</sup> 15 minutes.

**ExxonMobil (Company). Absorbed through skin.**

STEL: 1 ppm 15 minutes.

TWA: 0.5 ppm 8 hours.

NOTE: Limits/standards shown for guidance only. Follow applicable regulations.

## Section 8. Exposure controls/personal protection

- Appropriate engineering controls** : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.
- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.
- Individual protection measures**
- Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
- Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles. Face shield.
- Skin protection**
- Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. If product is hot, thermally protective, chemical resistant gloves are recommended. If contact with forearms is likely, wear gauntlet style gloves. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
- Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. If product is hot, thermally protective, chemical resistant apron and long sleeves are recommended. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.
- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. Positive-pressure, air-supplied respirator in areas where H2S vapors may accumulate is recommended.

## Section 9. Physical and chemical properties and safety characteristics

**Note: Physical and chemical properties are provided for safety, health and environmental considerations only and may not fully represent product specifications. Contact the Supplier for additional information.**

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

### Appearance

- Physical state** : Gas. [Compressed or Liquified]
- Color** : Colorless
- Odor** : Rotten Egg

## Section 9. Physical and chemical properties and safety characteristics

<b>Odor threshold</b>	: Not available.
<b>pH</b>	: Not applicable.
<b>Melting point/freezing point</b>	: Not applicable.
<b>Boiling point, initial boiling point, and boiling range</b>	: Not applicable.
<b>Flash point</b>	: Closed cup: <-18°C (<-0.4°F)
<b>Evaporation rate</b>	: Not available.
<b>Flammability</b>	: Flammable gases - Category 1
<b>Lower and upper explosion limit/flammability limit</b>	: Lower: 1% Upper: 45%
<b>Vapor pressure</b>	: Not available.
<b>Relative vapor density</b>	: 0.62 to 0.9 [Air = 1]
<b>Relative density</b>	: <1
<b>Solubility in water</b>	: Negligible
<b>Partition coefficient: n-octanol/water</b>	: Not applicable.
<b>Auto-ignition temperature</b>	: Not available.
<b>Decomposition temperature</b>	: Not available.
<b>Viscosity</b>	: Not applicable.
<b>Particle characteristics</b>	
<b>Median particle size</b>	: Not applicable.

## Section 10. Stability and reactivity

<b>Reactivity</b>	: No specific test data related to reactivity available for this product or its ingredients.
<b>Chemical stability</b>	: The product is stable.
<b>Possibility of hazardous reactions</b>	: Under normal conditions of storage and use, hazardous reactions will not occur.
<b>Conditions to avoid</b>	: Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.
<b>Incompatible materials</b>	: Strong oxidizers
<b>Hazardous decomposition products</b>	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## Section 11. Toxicological information

### Information on toxicological effects

#### Acute toxicity

Product/ingredient name	Test	Species	Result	Duration
hydrogen sulfide	LC50 Inhalation Gas.	Rat	444 ppm_m	4 hours

#### Conclusion/Summary

<b>Inhalation</b>	: Toxic No end point data for material. Based on assessment of the components.
<b>Dermal</b>	: Minimally Toxic. No end point data for material.
<b>Oral</b>	: Minimally Toxic. No end point data for material.

#### Irritation/Corrosion

## Section 11. Toxicological information

### Conclusion/Summary

- Skin** : Mildly irritating to skin with prolonged exposure. No end point data for material.
- Eyes** : May cause mild, short-lasting discomfort to eyes. No end point data for material.
- Respiratory** : Negligible hazard at ambient/normal handling temperatures. No end point data for material. Elevated temperatures or mechanical action may form vapors, mist, or fumes which may be irritating to the eyes, nose, throat, or lungs.

### Sensitization

#### Conclusion/Summary

- Skin** : Not expected to be a skin sensitizer. No end point data for material. Based on assessment of the components.
- Respiratory** : Not expected to be a respiratory sensitizer. No end point data for material. Based on assessment of the components.

### Mutagenicity

#### Conclusion/Summary

- : May cause genetic defects. No end point data for material. Based on assessment of the components.

### Carcinogenicity

#### Conclusion/Summary

- : May cause cancer. No end point data for material. Based on assessment of the components.

### Classification

Product/ingredient name	IARC	NTP	ACGIH
benzene	1	Known to be a human carcinogen.	A1

### Reproductive toxicity

#### Conclusion/Summary

- : Not expected to be a reproductive toxicant. No end point data for material. Based on assessment of the components.

### Specific target organ toxicity (single exposure)

#### Conclusion/Summary

- : Not expected to cause organ damage from a single exposure. No end point data for material.

### Specific target organ toxicity (repeated exposure)

#### Conclusion/Summary

- : Not expected to cause organ damage from prolonged or repeated exposure. No end point data for material. Based on assessment of the components.

### Aspiration hazard

#### Conclusion/Summary

- : Not expected to be an aspiration hazard. Based on physico-chemical properties of the material. Data available.

### Other information

#### Contains

- : HYDROGEN SULFIDE : Chronic health effects due to repeated exposures to low levels of H2S have not been established. High level (700 ppm) acute exposure can result in sudden death. High concentrations will lead to cardiopulmonary arrest due to nervous system toxicity and pulmonary edema. Lower levels (150 ppm) may overwhelm sense of smell, eliminating warning of exposure. Symptoms of overexposure to H2S include headache, fatigue, insomnia, irritability, and gastrointestinal problems. Repeated exposures to approximately 25 ppm will irritate mucous membranes and the respiratory system and have been implicated in some eye damage. BENZENE: Caused cancer (acute myeloid leukemia and myelodysplastic syndrome), damage to the blood-producing system, and serious blood disorders in human studies. Caused genetic effects and effects on the immune system in laboratory animal and some human studies. Caused toxicity to the fetus and cancer in laboratory animal studies.

## Section 11. Toxicological information

**Product** : Simple asphyxiant: Acts by displacing oxygen in the lungs thereby diminishing the supply of oxygen available to the blood and tissues. Symptoms include shortness of breath, rapid heart rate, incoordination, lethargy, headaches, nausea, vomiting, and disorientation. Continued lack of oxygen may result in convulsions, loss of consciousness and death. Since exercise increases the tissue need for oxygen, symptoms will occur more quickly during exertion in an oxygen-deficient environment. Oxygen in enclosed spaces should be maintained at 21 percent by volume. May cause central nervous system disorder (e.g., narcosis involving a loss of coordination, weakness, fatigue, mental confusion and blurred vision) and/or damage. Exposure to this material, or one of its components, in situations where there is the potential for high levels, such as in confined spaces or with abuse, may result in abnormal heart rhythm (arrhythmia). High-level exposure to hydrocarbons (above occupational exposure limits) may initiate arrhythmia in a worker that is undergoing stress or is taking a heart-stimulating substance such as epinephrine, a nasal decongestant, or an asthma or cardiovascular drug.

## Section 12. Ecological information

The information given is based on data for the material, components of the material, or for similar materials, through the application of bridging principals.

### Toxicity

#### Conclusion/Summary

**Acute toxicity** : Toxic to aquatic life.  
**Chronic toxicity** : Harmful to aquatic life with long lasting effects.

### Persistence and degradability

**Biodegradability** : Material -- Expected to be inherently biodegradable  
**Atmospheric Oxidation** : Material -- Expected to degrade at a moderate rate in air

### Bioaccumulative potential

**Conclusion/Summary** : Material -- Potential to bioaccumulate is low.

### Mobility in soil

**Mobility** : Material -- Highly volatile, will partition rapidly to air. Not expected to partition to sediment and wastewater solids.

### Other ecological information

**Other adverse effects** : No known significant effects or critical hazards.

## Section 13. Disposal considerations

**Disposal methods** : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. Empty Container Warning (where applicable): Empty containers may contain residue and can be dangerous. Do not attempt to refill or clean containers without proper instructions. Empty drums should be completely drained and safely stored until appropriately reconditioned or disposed. Empty containers should be taken for recycling, recovery, or disposal through suitably qualified or licensed contractor and in accordance with governmental regulations. DO NOT PRESSURISE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND, OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF

## Section 13. Disposal considerations

IGNITION. THEY MAY EXPLODE AND CAUSE INJURY OR DEATH.

## Section 14. Transport information

	TDG Classification	DOT Classification	IMDG	IATA
UN number	UN1953	UN1953	UN1953	UN1953
UN proper shipping name	COMPRESSED GAS, TOXIC, FLAMMABLE, N.O.S. (methane, hydrogen sulfide)	Compressed gas, toxic, flammable, n.o.s. (methane, hydrogen sulfide)	COMPRESSED GAS, TOXIC, FLAMMABLE, N.O.S. (methane, hydrogen sulfide)	Compressed gas, toxic, flammable, n.o.s. (methane, hydrogen sulfide)
Transport hazard class(es)	2 (2)	2 (2)	2.3 (2.1)	2.3 (2.1)
Label(s) / Mark(s)				
Packing group	-	-	-	-
Environmental hazards	No.	No.	No.	No.

### Additional information

#### TDG Classification

: Product classified as per the following sections of the Transportation of Dangerous Goods Regulations: 2.13-2.17 (Class 2), 2.13-2.17 (Class 2).

Toxic - Inhalation hazard

**Explosive Limit and Limited Quantity Index 0**

**ERAP Index 50**

**Passenger Carrying Vessel Index** Forbidden

**Passenger Carrying Road or Rail Index** Forbidden

**Special provisions** 16, 23, 38

#### DOT Classification

: Toxic - Inhalation hazard Zone A

**Reportable quantity** 250 lbs / 113.5 kg. Package sizes shipped in quantities less than the product reportable quantity are not subject to the RQ (reportable quantity) transportation requirements.

**Limited quantity** No.

**Packaging instruction** Exceptions: None. Non-bulk: 192. Bulk: 245.

**Quantity limitation** Passenger aircraft/rail: Forbidden. Cargo aircraft: Forbidden.

**Special provisions** 1

#### IMDG

: **Emergency schedules** F-D, S-U

**Special provisions** 274

Flash point <-18 °C C.C.

#### IATA

: **Quantity limitation** Passenger and Cargo Aircraft: Forbidden. Packaging instructions: Forbidden. Cargo Aircraft Only: Forbidden. Packaging instructions: Forbidden. Limited Quantities - Passenger Aircraft: Forbidden. Packaging instructions: Forbidden.

**Special provisions** A2

**Special precautions for user** : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

**Transport in bulk according to IMO instruments** : Not applicable.

## Section 15. Regulatory information

### Canadian lists

- Canadian NPRI** : The following components are listed: hydrogen sulphide; propane; benzene  
**CEPA Toxic substances** : The following components are listed: methane; carbon dioxide; benzene

### Inventory list

- Australia inventory (AIC)** : All components are listed or exempted.  
**Canada inventory (DSL-NDSL)** : All components are listed or exempted.  
**China inventory (IECSC)** : All components are listed or exempted.  
**Japan inventory (CSCL)** : All components are listed or exempted.  
**Japan inventory (Industrial Safety and Health Act)** : Not determined.  
**New Zealand Inventory of Chemicals (NZIoC)** : Not determined.  
**Philippines inventory (PICCS)** : All components are listed or exempted.  
**Korea inventory (KECI)** : All components are listed or exempted.  
**Taiwan Chemical Substances Inventory (TCSI)** : All components are listed or exempted.  
**United States inventory (TSCA 8b)** : All components are active or exempted.

## Section 16. Other information

### History

- Date of issue/Date of revision** : 24 June 2024  
**Date of previous issue** : No previous edition  
**Version** : 1

### Key to abbreviations

- ATE = Acute Toxicity Estimate  
BCF = Bioconcentration Factor  
GHS = Globally Harmonized System of Classification and Labelling of Chemicals  
HPR = Hazardous Products Regulations  
IATA = International Air Transport Association  
IBC = Intermediate Bulk Container  
IMDG = International Maritime Dangerous Goods  
LogPow = logarithm of the octanol/water partition coefficient  
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)  
N/A = Not available  
SGG = Segregation Group  
UN = United Nations

### Procedure used to derive the classification

Classification	Justification
FLAMMABLE GASES - Category 1	Expert judgment
GASES UNDER PRESSURE - Compressed gas	Expert judgment
SIMPLE ASPHYXIANTS - Category 1	Expert judgment
ACUTE TOXICITY (inhalation) - Category 2	Expert judgment
GERM CELL MUTAGENICITY - Category 1B	Expert judgment
CARCINOGENICITY - Category 1B	Expert judgment

- References** : Not available.

📌 Indicates information that has changed from previously issued version.

- Product code** : 1182148

### Notice to reader

## Section 16. Other information

The information and recommendations contained herein are, to the best of ExxonMobil's knowledge and belief, accurate and reliable as of the date issued. You can contact ExxonMobil to insure that this document is the most current available from ExxonMobil. The information and recommendations are offered for the user's consideration and examination. It is the user's responsibility to satisfy itself that the product is suitable for the intended use. If buyer repackages this product, it is the user's responsibility to insure proper health, safety and other necessary information is included with and/or on the container. Appropriate warnings and safe-handling procedures should be provided to handlers and users. Alteration of this document is strictly prohibited. Except to the extent required by law, re-publication or retransmission of this document, in whole or in part, is not permitted. The term, "ExxonMobil" is used for convenience, and may include any one or more of ExxonMobil Chemical Company, Exxon Mobil Corporation, or any affiliates in which they directly or indirectly hold any interest.