

Safety Data Sheet



Section 1: Identification

Product identifier

Product Name • Helium (98.931%), Carbon Dioxide (1.0%), Methyl Mercaptan (0.04%), Ethyl Mercaptan (0.02%), n-Propyl Mercaptan (0.009%) [Sulfur Experts 3]

Product Code • MSDS No.: 90074

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

Recommended use • Calibration Gas

Details of the supplier of the safety data sheet

Manufacturer • Air Liquide
2700 Post Oak Blvd.
Houston, TX 77056
United States
www.us.airliquide.com
sds@airliquide.com

Telephone (Technical) • 713-896-2896

Telephone (Technical) • 800-819-1704

Emergency telephone number

Manufacturer • 800-424-9300 - CHEMTREC

Manufacturer • +1 703-527-3887 - Outside United States

Section 2: Hazard Identification

United States (US)

According to OSHA 29 CFR 1910.1200 HCS

Classification of the substance or mixture

OSHA HCS 2012 • Compressed Gas - H280
Simple Asphyxiant

Label elements

OSHA HCS 2012

WARNING



Hazard statements • Contains gas under pressure; may explode if heated - H280
May displace oxygen and cause rapid suffocation.

HCS 2012 Other Information

Other hazards

OSHA HCS 2012

- Mixtures containing carbon dioxide can increase respiration and heart rate.
- Under United States Regulations (29 CFR 1910.1200 - Hazard Communication Standard), this product is considered hazardous.

Canada

According to WHMIS

Classification of the substance or mixture

WHMIS

- Compressed Gas - A

Label elements

WHMIS



- Compressed Gas - A

Other hazards

WHMIS

- This material is a simple asphyxiant. May displace or reduce oxygen available for breathing especially in confined spaces.
In Canada, the product mentioned above is considered hazardous under the Workplace Hazardous Materials Information System (WHMIS).

Other information

- Mixtures containing carbon dioxide can increase respiration and heart rate.

Section 3 - Composition/Information on Ingredients

Substances

- Material does not meet the criteria of a substance.

Mixtures

Hazardous Components					
Chemical Name	Identifiers	% (weight)	LD50/LC50	Classifications According to Regulation/Directive	Comments
Helium	CAS:7440-59-7	98.931%	NDA	OSHA HCS 2012: Press. Gas - Comp.; Simple Asphyxiant	Balance
Carbon dioxide	CAS:124-38-9	1%	Inhalation-Rat LC50 • 470000 ppm 30 Minute (s)	OSHA HCS 2012: Press. Gas - Comp.; Simple Asphyxiant	NDA
Methyl Mercaptan	CAS:74-93-1	0.04%	Inhalation-Rat LC50 • 675 ppm	OSHA HCS 2012: Flam. Gas. 1; Press. Gas - Comp.; Eye Irrit. 2A; Skin Irrit. 2; STOT SE 3 Resp. Irrit. & Narc.; Acute Tox. 3 (inhl)	NDA
Ethyl Mercaptan	CAS:75-08-1	0.02%	Ingestion/Oral-Rat LD50 • 682 mg/kg	OSHA HCS 2012: Flam. Liq. 2; Eye Irrit. 2A; Skin Irrit. 2, STOT SE 3: Resp. & Narc.; Acute Tox. 4 (oral); Acute Tox. 4 (inhl)	NDA

n-Propyl Mercaptan	CAS:107-03-9	0.009%	Ingestion/Oral-Rat LD50 • 1790 mg/kg	OSHA HCS 2012: Flam. Liq. 2; Eye Irrit. 2A; Skin Irrit. 2; STOT SE 3 - Resp. Irrit.; Acute Tox. 4 (oral); Acute Tox. 4 (inhl)	NDA
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Section 4: First-Aid Measures

Description of first aid measures

Inhalation

- IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Administer oxygen if breathing is difficult. Give artificial respiration if victim is not breathing. If signs/symptoms continue, get medical attention.

Skin

- Although exposure is unlikely, in case of contact immediately flush skin with running water. If skin irritation develops get medical advice/attention.

Eye

- First aid is not expected to be necessary if material is used under ordinary conditions and as recommended. If irritation develops and persists, get medical attention.

Ingestion

- Ingestion is not considered a potential route of exposure.

Most important symptoms and effects, both acute and delayed

- Refer to Section 11 - Toxicological Information.

Indication of any immediate medical attention and special treatment needed

Notes to Physician

- All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred. A potential health hazard associated with this gas is anoxia.

Other information

- Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves. RESCUERS SHOULD NOT ATTEMPT TO RETRIEVE VICTIMS OF EXPOSURE TO GASES WITHOUT ADEQUATE PERSONAL PROTECTIVE EQUIPMENT. At a minimum, Self-Contained Breathing Apparatus must be worn. Victim(s) who experience any adverse effect after over-exposure to this gas mixture must be taken for medical attention. Rescuers should be taken for medical attention if necessary. Take a copy of the label and the MSDS to physician or other health professional with victim(s).

Section 5: Fire-Fighting Measures

Extinguishing media

Suitable Extinguishing Media • Use extinguishing agent suitable for type of surrounding fire.

Unsuitable Extinguishing Media • No data available

Special hazards arising from the substance or mixture

Unusual Fire and Explosion Hazards • Containers may explode when heated.
Ruptured cylinders may rocket.

Hazardous Combustion Products • No data available

Advice for firefighters

- Structural firefighters' protective clothing provides limited protection in fire situations ONLY; it is not effective in spill situations where direct contact with the substance is possible.
Always wear thermal protective clothing when handling refrigerated/cryogenic liquids.
Wear positive pressure self-contained breathing apparatus (SCBA).

Move containers from fire area if you can do it without risk.

FIRE: If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions.

FIRE INVOLVING TANKS: Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.

FIRE INVOLVING TANKS: Cool containers with flooding quantities of water until well after fire is out.

FIRE INVOLVING TANKS: Do not direct water at source of leak or safety devices; icing may occur.

FIRE INVOLVING TANKS: Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.

FIRE INVOLVING TANKS: ALWAYS stay away from tanks engulfed in fire.

Section 6 - Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

Personal Precautions

- Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Do not touch or walk through spilled material. Ventilate the area before entry.

Emergency Procedures

- Stop leak if you can do it without risk. Keep unauthorized personnel away. Keep out of low areas. Stay upwind. Do not direct water at spill or source of leak. LARGE SPILL: Consider initial downwind evacuation for at least 500 meters (1/3 mile)

Environmental precautions

- No special environmental precautions necessary.

Methods and material for containment and cleaning up

Containment/Clean-up Measures

- Stop leak if you can do it without risk.
Do not direct water at spill or source of leak.
Use water spray to reduce vapors; do not put water directly on leak, spill area or inside container.
If possible, turn leaking containers so that gas escapes rather than liquid.
Isolate area until gas has dispersed.
Ventilate the area.

Reference to other sections

- Refer to Section 8 - Exposure Controls/Personal Protection and Section 13 - Disposal Considerations.

Section 7 - Handling and Storage

Precautions for safe handling

Handling

- Use only with adequate ventilation. Ventilate closed spaces before entering. Be aware of any signs of dizziness or fatigue, especially if work is done in a poorly ventilated area; exposures to fatal concentrations of this gas mixture could occur without any significant warning symptoms, due to olfactory fatigue or oxygen deficiency. Cylinders should be firmly secured to prevent falling or being knocked-over. Do not attempt to repair, adjust, or in any other way modify cylinders. If there is a malfunction or another type of operational problem, contact nearest distributor immediately. Empty containers retain product residue and can be hazardous. Do not cut, weld, puncture or incinerate container.

Conditions for safe storage, including any incompatibilities

Storage

- Store in a cool, dry, well-ventilated place. Protect cylinders against physical damage. Cylinders should be firmly secured to prevent falling or being knocked-over.

Specific end use(s)

- Refer to Section 1.2 - Relevant identified uses.

Section 8 - Exposure Controls/Personal Protection

Control parameters

Exposure Limits/Guidelines						
	Result	ACGIH	Canada Ontario	Canada Quebec	NIOSH	OSHA
n-Propyl Mercaptan (107-03-9)	Ceilings	Not established	Not established	Not established	0.5 ppm Ceiling (15 min); 1.6 mg/m ³ Ceiling (15 min)	Not established
Ethyl Mercaptan (75-08-1)	TWAs	0.5 ppm TWA	0.5 ppm TWA	0.5 ppm TWAEV; 1.3 mg/m ³ TWAEV	Not established	Not established
	Ceilings	Not established	Not established	Not established	0.5 ppm Ceiling (15 min); 1.3 mg/m ³ Ceiling (15 min)	10 ppm Ceiling; 25 mg/m ³ Ceiling
Methyl Mercaptan (74-93-1)	TWAs	0.5 ppm TWA	0.5 ppm TWA	0.5 ppm TWAEV; 0.98 mg/m ³ TWAEV	Not established	Not established
	Ceilings	Not established	Not established	Not established	0.5 ppm Ceiling (15 min); 1 mg/m ³ Ceiling (15 min)	10 ppm Ceiling; 20 mg/m ³ Ceiling
Carbon dioxide (124-38-9)	STELs	30000 ppm STEL	30000 ppm STEL	30000 ppm STEV; 54000 mg/m ³ STEV	30000 ppm STEL; 54000 mg/m ³ STEL	Not established
	TWAs	5000 ppm TWA	5000 ppm TWA	5000 ppm TWAEV; 9000 mg/m ³ TWAEV	5000 ppm TWA; 9000 mg/m ³ TWA	5000 ppm TWA; 9000 mg/m ³ TWA

Exposure controls

Engineering Measures/Controls

- Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Personal Protective Equipment

Respiratory

- Follow the OSHA respirator regulations found in 29 CFR 1910.134. Use a NIOSH/MSHA approved respirator if exposure limits are exceeded or symptoms are experienced.

Eye/Face

- Wear safety glasses.

Skin/Body

- Wear leather gloves when handling cylinders.

Environmental Exposure Controls

- Follow best practice for site management and disposal of waste. Controls should be engineered to prevent release to the environment, including procedures to prevent spills, atmospheric release and release to waterways.

Key to abbreviations

ACGIH = American Conference of Governmental Industrial Hygiene

NIOSH = National Institute of Occupational Safety and Health

OSHA = Occupational Safety and Health Administration

PEL = Permissible Exposure Level determined by the Occupational Safety and Health Administration (OSHA)

STEL = Short Term Exposure Limits are based on 15-minute exposures

STEV = Short Term Exposure Value

TWA = Time-Weighted Averages are based on 8h/day, 40h/week exposures

TWAEV = Time-Weighted Average Exposure Value

Section 9 - Physical and Chemical Properties

Information on Physical and Chemical Properties

Material Description			
Physical Form	Gas	Appearance/Description	Colorless gas with a rotten cabbage odor.
Color	Colorless	Odor	Rotten cabbage odor.
Odor Threshold	Data lacking		
General Properties			
Boiling Point	-269 C(-452.2 F) Helium	Melting Point	-272.2 C(-457.96 F) Helium
Decomposition Temperature	Data lacking	pH	Not relevant
Specific Gravity/Relative Density	Data lacking	Bulk Density	Data lacking
Water Solubility	Negligible < 0.1 %	Viscosity	0.0002 Poise (P, Ps) or dyne-second/cm ² @ 32 F(0 C) Helium
Volatility			
Vapor Pressure	Data lacking	Vapor Density	0.153 Air=1
Evaporation Rate	Data lacking		
Flammability			
Flash Point	Not relevant	UEL	Not relevant
LEL	Not relevant	Autoignition	Not relevant
Flammability (solid, gas)	Not flammable.		
Environmental			
Octanol/Water Partition coefficient	Data lacking		

Section 10: Stability and Reactivity

Reactivity

- No dangerous reaction known under conditions of normal use.

Chemical stability

- Stable under normal temperatures and pressures.

Possibility of hazardous reactions

- Hazardous polymerization will not occur.

Conditions to avoid

- Excess heat.

Incompatible materials

- No data available

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

Component Name	CAS	Data
Carbon dioxide (1%)	124-38-9	Acute Toxicity: ihl-rat LC50:470000 ppm/30M; Reproductive: ihl-rat TCLo:6 pph/24H (10D preg)
Methyl Mercaptan (0.04%)	74-93-1	Acute Toxicity: ihl-rat LC50:675 ppm
Ethyl Mercaptan (0.02%)	75-08-1	Acute Toxicity: orl-rat LD50:682 mg/kg; ihl-rat LC50:4420 ppm/4H; Irritation: eye-rbt 100 mg/24H MOD; skn-rbt 500 mg/24H MLD
n-Propyl Mercaptan (0.009%)	107-03-9	Acute Toxicity: orl-rat LD50:1790 mg/kg; ihl-rat LC50:7300 ppm/4H; Irritation: eye-rbt 83 mg SEV
GHS Properties		Classification
Acute toxicity		OSHA HCS 2012 • Classification criteria not met
Aspiration Hazard		OSHA HCS 2012 • Classification criteria not met
Carcinogenicity		OSHA HCS 2012 • Classification criteria not met
Germ Cell Mutagenicity		OSHA HCS 2012 • Classification criteria not met
Respiratory sensitization		OSHA HCS 2012 • Classification criteria not met
Serious eye damage/Irritation		OSHA HCS 2012 • Classification criteria not met
Skin corrosion/Irritation		OSHA HCS 2012 • Classification criteria not met
Skin sensitization		OSHA HCS 2012 • Classification criteria not met
STOT-RE		OSHA HCS 2012 • Classification criteria not met
STOT-SE		OSHA HCS 2012 • Classification criteria not met
Toxicity for Reproduction		OSHA HCS 2012 • Classification criteria not met

Route(s) of entry/exposure

- Inhalation, Skin, Eye, Ingestion

Potential Health Effects**Inhalation****Acute (Immediate)**

- Inhalation of carbon dioxide can increase respiration and heart rate. If this material is released in a small, poorly ventilated area (i.e. an enclosed or confined space), an oxygen-deficient environment may occur. Individuals breathing such an atmosphere may experience symptoms which include headaches, ringing in ears, dizziness, drowsiness, unconsciousness, nausea, vomiting, and depression of all the senses. Under some circumstances of over-exposure, death may occur. The following effects associated with decreased levels of oxygen: increase in breathing and pulse rate, emotional upset, abnormal fatigue, nausea, vomiting, collapse, loss of consciousness, convulsive movements, respiratory collapse and death.
- No data available

Chronic (Delayed)**Skin****Acute (Immediate)**

- Under normal conditions of use, no health effects are expected.

Chronic (Delayed)

- Under normal conditions of use, no health effects are expected.

Eye**Acute (Immediate)**

- Under normal conditions of use, no health effects are expected.

Chronic (Delayed)

- Under normal conditions of use, no health effects are expected.

Ingestion**Acute (Immediate)**

- Ingestion is not anticipated to be a likely route of exposure to this product.

Chronic (Delayed)

- Ingestion is not anticipated to be a likely route of exposure to this product.

Carcinogenic Effects

- The components of this material are not found on the following lists: FEDERAL OSHA Z LIST, NTP and IARC; therefore, they are not considered to be, nor suspected to be, cancer-causing agents by these agencies.

Reproductive Effects

- No data available.

Key to abbreviations

TC = Toxic Concentration	MOD = Moderate
LD = Lethal Dose	SEV = Severe
MLD = Mild	LC = Lethal Concentration

Section 12 - Ecological Information**Toxicity**

- Material data lacking.

Persistence and degradability

- Material data lacking.

Bioaccumulative potential

- Material data lacking.

Mobility in Soil

- Material data lacking.

Other adverse effects

- Material data lacking.

Section 13 - Disposal Considerations**Waste treatment methods****Product waste**

- Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Packaging waste

- Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Section 14 - Transport Information

	14.1 UN number	14.2 UN proper shipping name	14.3 Transport hazard class(es)	14.4 Packing group	14.5 Environmental hazards
DOT	UN1956	Compressed gas, n.o.s (Helium, Carbon Dioxide)	2.2	NDA	NDA
TDG	UN1956	COMPRESSED GAS, N.O.S. (Helium, Carbon Dioxide)	2.2	NDA	NDA
IMO/IMDG	UN1956	COMPRESSED GAS, N.O.S. (Helium, Carbon Dioxide)	2.2	NDA	NDA
IATA/ICAO	UN1956	Compressed gas, n.o.s (Helium, Carbon Dioxide)	2.2	NDA	NDA

Special precautions for user

- Cylinders should be transported in a secure position, in a well-ventilated vehicle. The transportation of compressed gas cylinders in automobiles or in closed-body vehicles can present serious safety hazards. If transporting these cylinders in vehicles, ensure these cylinders are not exposed to extremely high temperatures (as may occur in an enclosed vehicle on a hot day). Additionally, the vehicle should be well-ventilated

during transportation.

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

- Not relevant.

Other information

- DOT** • Methyl mercaptan has a reportable quantity of 100 lbs (45.4 kg) as listed in Appendix A to 49 CFR 172.101. Ethyl mercaptan is listed as a marine pollutant.

Section 15 - Regulatory Information

Safety, health and environmental regulations/legislation specific for the substance or mixture

SARA Hazard Classifications • Acute, Pressure(Sudden Release of)

State Right To Know				
Component	CAS	MA	NJ	PA
Helium	7440-59-7	Yes	Yes	Yes
Carbon dioxide	124-38-9	Yes	Yes	Yes
Methyl Mercaptan	74-93-1	Yes	Yes	Yes
Ethyl Mercaptan	75-08-1	Yes	Yes	Yes
n-Propyl Mercaptan	107-03-9	Yes	Yes	No

Inventory			
Component	CAS	Canada DSL	TSCA
Helium	7440-59-7	Yes	Yes
Carbon dioxide	124-38-9	Yes	Yes
Methyl Mercaptan	74-93-1	Yes	Yes
Ethyl Mercaptan	75-08-1	Yes	Yes
n-Propyl Mercaptan	107-03-9	Yes	Yes

Canada

Labor

Canada - WHMIS - Classifications of Substances

- n-Propyl Mercaptan 107-03-9 0.009% Not Listed
- Carbon dioxide 124-38-9 1% A; Uncontrolled product according to WHMIS classification criteria (solid)
- Ethyl Mercaptan 75-08-1 0.02% B2
- Helium 7440-59-7 98.931% A
- Methyl Mercaptan 74-93-1 0.04% A, B1, D1A

Canada - WHMIS - Ingredient Disclosure List

- n-Propyl Mercaptan 107-03-9 0.009% 1 %
- Carbon dioxide 124-38-9 1% 1 %
- Ethyl Mercaptan 75-08-1 0.02% 1 %
- Helium 7440-59-7 98.931% Not Listed
- Methyl Mercaptan 74-93-1 0.04% 1 %

United States

Labor

U.S. - OSHA - Process Safety Management - Highly Hazardous Chemicals

• n-Propyl Mercaptan	107-03-9	0.009%	Not Listed
• Carbon dioxide	124-38-9	1%	Not Listed
• Ethyl Mercaptan	75-08-1	0.02%	Not Listed
• Helium	7440-59-7	98.931%	Not Listed
• Methyl Mercaptan	74-93-1	0.04%	5000 lb TQ

Environment

U.S. - CERCLA/SARA - Hazardous Substances and their Reportable Quantities

• n-Propyl Mercaptan	107-03-9	0.009%	Not Listed
• Carbon dioxide	124-38-9	1%	Not Listed
• Ethyl Mercaptan	75-08-1	0.02%	Not Listed
• Helium	7440-59-7	98.931%	Not Listed
• Methyl Mercaptan	74-93-1	0.04%	100 lb final RQ; 45.4 kg final RQ

U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances EPCRA RQs

• n-Propyl Mercaptan	107-03-9	0.009%	Not Listed
• Carbon dioxide	124-38-9	1%	Not Listed
• Ethyl Mercaptan	75-08-1	0.02%	Not Listed
• Helium	7440-59-7	98.931%	Not Listed
• Methyl Mercaptan	74-93-1	0.04%	100 lb EPCRA RQ

U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances TPQs

• n-Propyl Mercaptan	107-03-9	0.009%	Not Listed
• Carbon dioxide	124-38-9	1%	Not Listed
• Ethyl Mercaptan	75-08-1	0.02%	Not Listed
• Helium	7440-59-7	98.931%	Not Listed
• Methyl Mercaptan	74-93-1	0.04%	500 lb TPQ

U.S. - RCRA (Resource Conservation & Recovery Act) - Hazardous Constituents - Appendix VIII to 40 CFR 261

• n-Propyl Mercaptan	107-03-9	0.009%	Not Listed
• Carbon dioxide	124-38-9	1%	Not Listed
• Ethyl Mercaptan	75-08-1	0.02%	Not Listed
• Helium	7440-59-7	98.931%	Not Listed
• Methyl Mercaptan	74-93-1	0.04%	waste number U153

U.S. - RCRA (Resource Conservation & Recovery Act) - U Series Wastes - Acutely Toxic Wastes & Other Hazardous Characteristics

• n-Propyl Mercaptan	107-03-9	0.009%	Not Listed
• Carbon dioxide	124-38-9	1%	Not Listed
• Ethyl Mercaptan	75-08-1	0.02%	Not Listed
• Helium	7440-59-7	98.931%	Not Listed
• Methyl Mercaptan	74-93-1	0.04%	waste number U153 (Ignitable waste, Toxic waste)

United States - California

Environment

U.S. - California - Proposition 65 - Carcinogens List

• n-Propyl Mercaptan	107-03-9	0.009%	Not Listed
• Carbon dioxide	124-38-9	1%	Not Listed
• Ethyl Mercaptan	75-08-1	0.02%	Not Listed
• Helium	7440-59-7	98.931%	Not Listed
• Methyl Mercaptan	74-93-1	0.04%	Not Listed

U.S. - California - Proposition 65 - Developmental Toxicity

• n-Propyl Mercaptan	107-03-9	0.009%	Not Listed
• Carbon dioxide	124-38-9	1%	Not Listed
• Ethyl Mercaptan	75-08-1	0.02%	Not Listed
• Helium	7440-59-7	98.931%	Not Listed
• Methyl Mercaptan	74-93-1	0.04%	Not Listed

U.S. - California - Proposition 65 - Maximum Allowable Dose Levels (MADL)

• n-Propyl Mercaptan	107-03-9	0.009%	Not Listed
• Carbon dioxide	124-38-9	1%	Not Listed
• Ethyl Mercaptan	75-08-1	0.02%	Not Listed
• Helium	7440-59-7	98.931%	Not Listed
• Methyl Mercaptan	74-93-1	0.04%	Not Listed

U.S. - California - Proposition 65 - No Significant Risk Levels (NSRL)

• n-Propyl Mercaptan	107-03-9	0.009%	Not Listed
• Carbon dioxide	124-38-9	1%	Not Listed
• Ethyl Mercaptan	75-08-1	0.02%	Not Listed
• Helium	7440-59-7	98.931%	Not Listed
• Methyl Mercaptan	74-93-1	0.04%	Not Listed

U.S. - California - Proposition 65 - Reproductive Toxicity - Female

• n-Propyl Mercaptan	107-03-9	0.009%	Not Listed
• Carbon dioxide	124-38-9	1%	Not Listed

• Ethyl Mercaptan	75-08-1	0.02%	Not Listed
• Helium	7440-59-7	98.931%	Not Listed
• Methyl Mercaptan	74-93-1	0.04%	Not Listed

U.S. - California - Proposition 65 - Reproductive Toxicity - Male

• n-Propyl Mercaptan	107-03-9	0.009%	Not Listed
• Carbon dioxide	124-38-9	1%	Not Listed
• Ethyl Mercaptan	75-08-1	0.02%	Not Listed
• Helium	7440-59-7	98.931%	Not Listed
• Methyl Mercaptan	74-93-1	0.04%	Not Listed

United States - Pennsylvania**Labor****U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List**

• n-Propyl Mercaptan	107-03-9	0.009%	Not Listed
• Carbon dioxide	124-38-9	1%	Not Listed
• Ethyl Mercaptan	75-08-1	0.02%	Not Listed
• Helium	7440-59-7	98.931%	Not Listed
• Methyl Mercaptan	74-93-1	0.04%	

Section 16 - Other Information**Last Revision Date**

- 20/January/2013

Preparation Date

- 15/October/2012

Disclaimer/Statement of Liability

- To the best of Air Liquide'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 gas mixture 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.

Key to abbreviations

NDA = No Data Available