

Section 1. Identification

Product identifier

Product Identity

Natural Gas (Sweet)

Other means of identification

Marsh Gas; Methane (CH₄); Fuel Gas.

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

Fuel gas, heating gas.

Details of the supplier of the safety data sheet

Company Name

TC Energy Corporation
450 – 1st Street SW
Calgary, AB T2P 5H1
TC Energy Corporation
700 Louisiana Street
Houston, TX 77002



Emergency

24 hour Emergency Telephone No.

Canada: 1-888-982-7222
US: 1-800-447-8066
Portland Natural Gas: 1-800-830-9865
Columbia Gas Transmission: 1-800-835-7191

Customer Service:

Section 2. Hazard(s) identification

Classification of the substance or mixture under US OSHA's Hazard Communication Standard (1910.1200) revised 2024 and Canadian Hazardous Products Regulations (SOR/2015-17) (GHS revision 7)

Flammable Gas, category 1;H220

Extremely flammable gas.

Gas under pressure;H280

Contains gas under pressure; may explode if heated.

Aquatic toxicity (chronic), category 3;H412

Harmful to aquatic life with long lasting effects.

Simple Asphyxiant

May displace oxygen and cause rapid suffocation.

Label elements



Danger

H220 Extremely flammable gas.

H280 Contains gas under pressure; may explode if heated.

H412 Harmful to aquatic life with long lasting effects.

May displace oxygen and cause rapid suffocation.

[Prevention]

P210 Keep away from heat, sparks, open flames, and other ignition sources - No smoking.
P273 Avoid release to the environment.

[Response]

P377 Leaking gas fire - do not extinguish unless leak can be stopped safely.
P381 In case of leakage, eliminate all ignition sources.

[Storage]

P410+403 Protect from sunlight. Store in a well ventilated place.

[Disposal]

P501 Dispose of contents or container in accordance with local and national regulations.

Other hazards

May displace oxygen and cause rapid suffocation.

This product contains no PBT/vPvB/vPvM chemicals.

This product contains no endocrine disrupting chemicals.

Does NOT contain component(s) that meet a 'definition' of per & poly fluoroalkyl substance (PFAS) per the US EPA PFASMASTER combined list of PFAS chemicals.

Section 3. Composition/information on ingredients

This product contains the following substances that present a hazard within the meaning of US OSHA's Hazard Communication Standard (1910.1200) revised 2024 and Canadian Hazardous Products Regulations (SOR/2015-17) (GHS revision 7)

Ingredient/Chemical Designations	Weight %	GHS Classification	Notes
Methane CAS Number: 74-82-8 Synonyms: No available information	80 - 100	Flammable Gas, category 1;H220 Gas under pressure;H280	No data available
Ethane CAS Number: 74-84-0 Synonyms: No available information	10 - 30	Flammable Gas, category 1;H220 Gas under pressure;H280	No data available
Propane CAS Number: 74-98-6 Synonyms: No available information	3 - 7	Flammable Gas, category 1;H220 Liquified Gas;H280 Simple Asphyxiant	No data available
Carbon dioxide CAS Number: 124-38-9 Synonyms: No available information	3 - 7	Gas under pressure;H280 Simple Asphyxiant	No data available
Nitrogen CAS Number: 7727-37-9 Synonyms: No available information	3 - 7	Simple Asphyxiant Compressed Gas;H280	No data available
Isobutane CAS Number: 75-28-5 Synonyms: Propane, 2-methyl-, 2-methylpropane	3 - 7	Flammable Gas, category 1;H220 Gas under pressure;H280	No data available
2-Methylbutane CAS Number: 78-78-4 Synonyms: Butane, 2-methyl-	3 - 7	Aspiration hazard, category 1;H304 Specific target organ toxicity, Single exposure category 3;H336 Aquatic toxicity (chronic), category 2;H411 Flammable Liquid, category 1;H224	No data available
Butane CAS Number: 106-97-8 Synonyms: No available information	3 - 7	Flammable Gas, category 1;H220 Liquified Gas;H280 Simple Asphyxiant	No data available

Pentane CAS Number: 109-66-0 Synonyms: n-pentane, C5 n-alkane	3 - 7	Flammable Liquid, category 2;H225 Aspiration hazard, category 1;H304 Specific target organ toxicity, Single exposure category 3;H336 Aquatic toxicity (chronic), category 2;H411	No data available
Helium CAS Number: 7440-59-7 Synonyms: No available information	3 - 7	Gas under pressure;H280	No data available

The actual concentration or concentration range is withheld as a trade secret.

*PBT/vPvB - PBT, vPvM or vPvB-substance.

The full texts of the phrases are shown in Section 16.

Section 4. First aid measures

Description of first aid measures

General	In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person.
Inhalation	Remove to fresh air, keep patient warm and at rest. If breathing is irregular or stopped, give artificial respiration. If unconscious, place in the recovery position and obtain immediate medical attention. Give nothing by mouth.
Eyes	Irrigate copiously with clean water for at least 15 minutes, holding the eyelids apart and seek medical attention.
Skin	Remove contaminated clothing. Wash skin thoroughly with soap and water or use a recognized skin cleanser.
Ingestion	If swallowed obtain immediate medical attention. Keep at rest. Do NOT induce vomiting.
Most important symptoms and effects, both acute and delayed	
Overview	No specific symptom data available. No chronic toxicity or long term toxicity information available. Treat symptomatically. See section 2 for further details.

Section 5. Fire-fighting measures

Extinguishing media

Small Fire: Dry chemical or CO₂.

Large Fire: Water spray or fog. Move containers from fire area if you can do it without risk.

Special hazards arising from the substance or mixture

Hazardous decomposition: Oxides of carbon. Oxides of sulphur.

Keep away from heat, sparks, open flames, and other ignition sources - No smoking.

Advice for fire-fighters

As with all fires, wear positive pressure, self-contained breathing apparatus, (SCBA) with a full face piece and protective clothing. Persons without respiratory protection should leave area. Wear SCBA during clean-up immediately after fire. No smoking.

Leaking gas fire: Do not extinguish, unless leak can be stopped safely. Eliminate all ignition sources if safe to do so. Vapors may cause dizziness or asphyxiation without warning. Some may be irritating if inhaled at high concentrations. Contact with gas or liquefied gas may cause burns, severe injury and/or frostbite. Fire may produce

irritating and/or toxic gases. Wear positive pressure self-contained breathing apparatus (SCBA). Structural firefighters' protective clothing will only provide limited protection. Always wear thermal protective clothing when handling refrigerated/cryogenic liquids.

Extremely flammable gas. Contains gas under pressure; may explode if heated. Will be easily ignited by heat, sparks or flames. Will form explosive mixtures with air. Vapors from liquefied gas are initially heavier than air and spread along ground. CAUTION: Methane is lighter than air and will rise. Vapors may travel to source of ignition and flash back. Cylinders exposed to fire may vent and release flammable gas through pressure relief devices. Containers may explode when heated. Ruptured cylinders may rocket. **DO NOT EXTINGUISH A LEAKING GAS FIRE UNLESS LEAK CAN BE STOPPED.**

If tank, rail car or tank truck is involved in a fire, ISOLATE for 1600 meters (1 mile) in all directions; also, consider initial evacuation for 1600 meters (1 mile) in all directions.

Fire involving Tanks: Fight fire from maximum distance or use unmanned hose holders or monitor nozzles. Cool containers with flooding quantities of water until well after fire is out. Do not direct water at source of leak or safety devices; icing may occur. Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank. **ALWAYS** stay away from tanks engulfed in fire. For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn.

ERG Guide No. 115

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

As an immediate precautionary measure, isolate spill or leak area for at least 100 meters (330 feet) in all directions. Keep unauthorized personnel away. Stay upwind. Many gases are heavier than air and will spread along ground and collect in low or confined areas (sewers, basements, tanks). Keep out of low areas. **ELIMINATE** all ignition sources (no smoking, flares, sparks or flames in immediate area). All equipment used when handling the product must be grounded.

Do not touch or walk through spilled material. Use personal protection recommended in Section 8.

Use good personal hygiene practices. Wash hands before eating, drinking, smoking, or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

Environmental precautions

Do not allow spills to enter drains or waterways.

Methods and material for containment and cleaning up

Stop leak if you can do it without risk. If possible, turn leaking containers so that gas escapes rather than liquid. Use water spray to reduce vapors or divert vapor cloud drift. Avoid allowing water runoff to contact spilled material. Do not direct water at spill or source of leak.

Prevent spreading of vapors through sewers, ventilation systems and confined areas. Isolate area until gas has dispersed

Section 7. Handling and storage

Precautions for safe handling

Handle containers carefully to prevent damage and spillage.

Avoid breathing gas. Keep away from heat, sparks, open flames, and hot surfaces. – No smoking. Pressurized container: Do not pierce or burn, even after use. See Section 8 for information on Personal Protective Equipment.

See section 2 for further details. - [Prevention]

Conditions for safe storage, including any incompatibilities

Store in a well-ventilated place. Protect from sunlight. Store away from incompatible materials. See Section 10 for information on Incompatible Materials. Keep out of the reach of children.

Incompatible materials: Strong acids. Strong oxidizers.

See section 2 for further details. - [Storage]

Specific end use(s)

No data available.

Section 8. Exposure controls / personal protection

Control parameters

Exposure Limits

CAS No.	Ingredient	Source	Value
74-82-8	Methane	ACGIH	(D) Simple Asphyxiant - (EX) Explosion hazard
		OSHA	No Established Limit
		NIOSH	No Established Limit
		Alberta	No Established Limit
		British Columbia	(D) Simple Asphyxiant - (EX) Explosion hazard
		Manitoba	See Appendix F: Minimal Oxygen Content, explosion hazard
		New Brunswick	No Established Limit
		Newfoundland and Labrador	See Appendix F: Minimal Oxygen Content, explosion hazard
		Nova Scotia	See Appendix F: Minimal Oxygen Content, explosion hazard
		Northwest Territories	1000 ppm TWA 1250 ppm STEL
		Nunavut	1000 ppm TWA 1250 ppm STEL
		Ontario	see Appendix F: Minimal Oxygen Content
		Prince Edward Island	See Appendix F: Minimal Oxygen Content, explosion hazard
		Quebec	No Established Limit
		Saskatchewan	1000 ppm TWA 1250 ppm STEL
		Yukon	No Established Limit
74-84-0	Ethane	ACGIH	(D) Simple Asphyxiant - (EX) Explosion hazard
		OSHA	No Established Limit
		NIOSH	No Established Limit
		Alberta	1000 ppm TWA
		British Columbia	No Established Limit
		Manitoba	See Appendix F: Minimal Oxygen Content, explosion hazard
		New Brunswick	No Established Limit
		Newfoundland and Labrador	See Appendix F: Minimal Oxygen Content, explosion hazard
		Nova Scotia	See Appendix F: Minimal Oxygen Content, explosion hazard

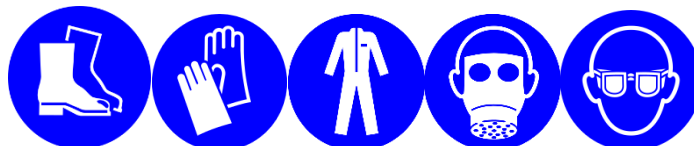
		Northwest Territories	1000 ppm TWA 1250 ppm STEL
		Nunavut	1000 ppm TWA 1250 ppm STEL
		Ontario	see Appendix F: Minimal Oxygen Content
		Prince Edward Island	See Appendix F: Minimal Oxygen Content, explosion hazard
		Quebec	No Established Limit
		Saskatchewan	1000 ppm TWA 1250 ppm STEL
		Yukon	No Established Limit
74-98-6	Propane	ACGIH	(D) Simple Asphyxiant - (EX) Explosion hazard
		OSHA	1000 ppm, 1800 mg/m ³
		NIOSH	TWA 1000 ppm (1800 mg/m ³)
		Alberta	1000 ppm TWA
		British Columbia	No Established Limit
		Manitoba	See Appendix F: Minimal Oxygen Content, explosion hazard
		New Brunswick	No Established Limit
		Newfoundland and Labrador	See Appendix F: Minimal Oxygen Content, explosion hazard
		Nova Scotia	See Appendix F: Minimal Oxygen Content, explosion hazard
		Northwest Territories	1000 ppm TWA 1250 ppm STEL
		Nunavut	1000 ppm TWA 1250 ppm STEL
		Ontario	see Appendix F: Minimal Oxygen Content
		Prince Edward Island	See Appendix F: Minimal Oxygen Content, explosion hazard
		Quebec	1000 ppm TWAEV; 1800 mg/m ³ TWAEV
		Saskatchewan	1000 ppm TWA 1250 ppm STEL
		Yukon	No Established Limit
75-28-5	Isobutane	ACGIH	1000 ppm (EX) Explosion hazard
		OSHA	No Established Limit
		NIOSH	TWA 800 ppm (1900 mg/m ³)
		Alberta	No Established Limit
		British Columbia	No Established Limit
		Manitoba	1000 ppm STEL (explosion hazard, listed under Butane, isomers)
		New Brunswick	No Established Limit
		Newfoundland and Labrador	1000 ppm STEL (explosion hazard, listed under Butane, isomers)
		Nova Scotia	1000 ppm STEL (explosion hazard, listed under Butane, isomers)
		Northwest Territories	1000 ppm TWA (listed under Butane, all isomers) 1250 ppm STEL (listed under Butane, all isomers)
		Nunavut	1000 ppm TWA (listed under Butane, all isomers) 1250 ppm STEL (listed under Butane, all isomers)
		Ontario	1000 ppm STEL (listed under Butane, all isomers)
		Prince Edward Island	1000 ppm STEL (explosion hazard, listed under Butane, isomers)
		Quebec	No Established Limit

		Saskatchewan	1000 ppm TWA (listed under Butane, all isomers) 1250 ppm STEL (listed under Butane, all isomers)
		Yukon	No Established Limit
78-78-4	2-Methylbutane	ACGIH	1000 ppm
		OSHA	No Established Limit
		NIOSH	No Established Limit
		Alberta	600 ppm TWA; 1770 mg/m ³ TWA
		British Columbia	1000 ppm TWA (listed under Pentane, all isomers)
		Manitoba	1000 ppm TWA (listed under Pentane, all isomers)
		New Brunswick	No Established Limit
		Newfoundland and Labrador	1000 ppm TWA (listed under Pentane, all isomers)
		Nova Scotia	1000 ppm TWA (listed under Pentane, all isomers)
		Northwest Territories	600 ppm TWA (listed under Pentane, all isomers) 750 ppm STEL (listed under Pentane, all isomers)
		Nunavut	600 ppm TWA (listed under Pentane, all isomers) 750 ppm STEL (listed under Pentane, all isomers)
		Ontario	1000 ppm TWA (listed under Pentane, all isomers)
		Prince Edward Island	1000 ppm TWA (listed under Pentane, all isomers)
		Quebec	No Established Limit
		Saskatchewan	600 ppm TWA (listed under Pentane, all isomers) 750 ppm STEL (listed under Pentane, all isomers)
		Yukon	No Established Limit
106-97-8	Butane	ACGIH	1000 ppm (EX) Explosion hazard
		OSHA	No Established Limit
		NIOSH	TWA 800 ppm (1900 mg/m ³)
		Alberta	1000 ppm TWA
		British Columbia	750 ppm STEL
		Manitoba	1000 ppm STEL (explosion hazard, listed under Butane, isomers)
		New Brunswick	800 ppm TWA; 1900 mg/m ³ TWA
		Newfoundland and Labrador	1000 ppm STEL (explosion hazard, listed under Butane, isomers)
		Nova Scotia	1000 ppm STEL (explosion hazard, listed under Butane, isomers)
		Northwest Territories	1000 ppm TWA (listed under Butane, all isomers) 1250 ppm STEL (listed under Butane, all isomers)
		Nunavut	1000 ppm TWA (listed under Butane, all isomers) 1250 ppm STEL (listed under Butane, all isomers)
		Ontario	1000 ppm STEL (listed under Butane, all isomers)
		Prince Edward Island	1000 ppm STEL (explosion hazard, listed under Butane, isomers)
		Quebec	800 ppm TWAEV; 1900 mg/m ³ TWAEV
		Saskatchewan	1000 ppm TWA (listed under Butane, all isomers) 1250 ppm STEL (listed under Butane, all isomers)
		Yukon	600 ppm TWA; 1400 mg/m ³ TWA 750 ppm STEL; 1600 mg/m ³ STEL
109-66-0	Pentane	ACGIH	1000 ppm

		OSHA	1000 ppm, 2950 mg/m ³
		NIOSH	TWA 120 ppm (350 mg/m ³) C 610 ppm (1800 mg/m ³) [15-minute]
		Alberta	600 ppm TWA; 1770 mg/m ³ TWA
		British Columbia	1000 ppm TWA (listed under Pentane, all isomers)
		Manitoba	1000 ppm TWA (listed under Pentane, all isomers)
		New Brunswick	600 ppm TWA; 1770 mg/m ³ TWA 750 ppm STEL; 2210 mg/m ³ STEL
		Newfoundland and Labrador	1000 ppm TWA (listed under Pentane, all isomers)
		Nova Scotia	1000 ppm TWA (listed under Pentane, all isomers)
		Northwest Territories	600 ppm TWA (listed under Pentane, all isomers) 750 ppm STEL (listed under Pentane, all isomers)
		Nunavut	600 ppm TWA (listed under Pentane, all isomers) 750 ppm STEL (listed under Pentane, all isomers)
		Ontario	1000 ppm TWA
		Prince Edward Island	1000 ppm TWA (listed under Pentane, all isomers)
		Quebec	120 ppm TWAEV; 350 mg/m ³ TWAEV
		Saskatchewan	600 ppm TWA 750 ppm STEL
		Yukon	600 ppm TWA; 1800 mg/m ³ TWA 750 ppm STEL; 2250 mg/m ³ STEL
124-38-9	Carbon dioxide	ACGIH	5000 ppm 30,000 ppm
		OSHA	5000 ppm, 9000 mg/m ³
		NIOSH	TWA 5000 ppm (9000 mg/m ³) STEL: 30,000 ppm (54,000 mg/m ³)
		Alberta	5000 ppm TWA; 9000 mg/m ³ TWA 30000 ppm STEL; 54000 mg/m ³ STEL
		British Columbia	5000 ppm TWA 15000 ppm STEL
		Manitoba	5000 ppm TWA 30000 ppm STEL
		New Brunswick	5000 ppm TWA; 9000 mg/m ³ TWA 30000 ppm STEL; 54000 mg/m ³ STEL
		Newfoundland and Labrador	5000 ppm TWA 30000 ppm STEL
		Nova Scotia	5000 ppm TWA 30000 ppm STEL
		Northwest Territories	5000 ppm TWA 30000 ppm STEL
		Nunavut	5000 ppm TWA 30000 ppm STEL
		Ontario	5000 ppm TWA 30000 ppm STEL
		Prince Edward Island	5000 ppm TWA 30000 ppm STEL
		Quebec	5000 ppm TWAEV; 9000 mg/m ³ TWAEV 30000 ppm STEV; 54000 mg/m ³ STEV
		Saskatchewan	5000 ppm TWA 30000 ppm STEL
		Yukon	5000 ppm TWA; 9000 mg/m ³ TWA 15000 ppm STEL; 27000 mg/m ³ STEL
7440-59-7	Helium	ACGIH	(D) Simple Asphyxiant
		OSHA	No Established Limit
		NIOSH	No Established Limit
		Alberta	No Established Limit

		British Columbia	No Established Limit
		Manitoba	See Appendix F: Minimal Oxygen Content
		New Brunswick	No Established Limit
		Newfoundland and Labrador	See Appendix F: Minimal Oxygen Content
		Nova Scotia	See Appendix F: Minimal Oxygen Content
		Northwest Territories	No Established Limit
		Nunavut	No Established Limit
		Ontario	see Appendix F: Minimal Oxygen Content
		Prince Edward Island	See Appendix F: Minimal Oxygen Content
		Quebec	No Established Limit
		Saskatchewan	No Established Limit
		Yukon	No Established Limit
7727-37-9	Nitrogen	ACGIH	(D) Simple Asphyxiant
		OSHA	No Established Limit
		NIOSH	No Established Limit
		Alberta	No Established Limit
		British Columbia	No Established Limit
		Manitoba	See Appendix F: Minimal Oxygen Content
		New Brunswick	No Established Limit
		Newfoundland and Labrador	See Appendix F: Minimal Oxygen Content
		Nova Scotia	See Appendix F: Minimal Oxygen Content
		Northwest Territories	No Established Limit
		Nunavut	No Established Limit
		Ontario	see Appendix F: Minimal Oxygen Content
		Prince Edward Island	See Appendix F: Minimal Oxygen Content
		Quebec	No Established Limit
		Saskatchewan	No Established Limit
		Yukon	No Established Limit

Exposure controls



Respiratory

If engineering controls and ventilation are not sufficient to control exposure to below the allowable limits then an appropriate NIOSH/MSHA approved air-purifying respirator that meets the requirements of CSA Standard CAN/CSA- Z94.4-18, with organic vapor cartridge, or self-contained breathing apparatus must be used. Supplied air breathing

	apparatus must be used when oxygen concentrations are low or if airborne concentrations exceed the limits of the air- purifying respirators
Eyes	Wear safety glasses. Use equipment for eye protection that meets the standards referenced by CSA Standard CAN/CSA-Z94.3:20 and OSHA regulations in 29 CFR 1910.133 for Personal Protective Equipment.
Skin	Wear protective clothing to minimize skin contact. Wear protective gloves. Wear cold insulating gloves. Consult manufacturer specifications for further information.
Engineering Controls	Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and any vapor below occupational exposure limits suitable respiratory protection must be worn.
Other Work Practices	Use good personal hygiene practices. Wash hands before eating, drinking, smoking, or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

See section 2 for further details.

Section 9. Physical and chemical properties

Information on basic physical and chemical properties

Physical State	Gas
Color	Colourless compressed
Odor	Slight hydrocarbon
Odor threshold	Not Available
Melting point / freezing point	-187 to -182 °C (-304.6 to -295.6 °F)
Initial boiling point and boiling range	-162 °C (-259.6 °F)
Flammability (solid, gas)	Gas
Upper/lower flammability or explosive limits	Lower Explosive Limit:
	4.4 % (Natural Gas)
	5% (Methane)
	3% (Ethane)
	2.1% (Propane)
	1.8% (Butane & Isobutane)
	Upper Explosive Limit:
	16.4 % (Natural Gas)
	15% (Methane)
	12.5% (Ethane)
	9.5% (Propane)
	8.4% (Butane & Isobutane)
Flash Point	Not Available
Auto-ignition temperature	537 °C (998.6 °F)
Decomposition temperature	Not Available
pH	Not Available
Viscosity (cSt)	Not Available
Solubility in Water	Negligible solubility in water.
Partition coefficient n-octanol/water (Log Kow)	Not Available
Vapor pressure (Pa)	> 1000 mmHg at 20 °C (68 °F)
Relative Density	Not available

Vapor Density	0.6 (Air = 1) at 20 °C (68 °F) (Methane)
Evaporation rate (Ether = 1)	> 1 (n-BuAc = 1) at 20 °C (68 °F)
VOC Content	Not Available
Percent Volatile	100 wt %
Flammability	Extremely flammable gas.
Other information	
No other relevant information.	

Section 10. Stability and reactivity

Reactivity

Hazardous Polymerization will not occur.

Chemical stability

Stable under normal circumstances.

Possibility of hazardous reactions

No data available.

Conditions to avoid

Contact with incompatible materials. Sources of ignition. Exposure to heat.

Incompatible materials

Strong acids. Strong oxidizers.

Hazardous decomposition products

Oxides of carbon. Oxides of sulphur.

Section 11. Toxicological information

Acute toxicity

Note: When no route specific LD50 data is available for an acute toxin, the converted acute toxicity point estimate was used in the calculation of the product's ATE (Acute Toxicity Estimate).

Ingredient	Oral LD50, mg/kg	Skin LD50, mg/kg	Inhalation Vapor LC50, mg/L/4hr	Inhalation Dust/Mist LC50, mg/L/4hr	Inhalation Gas LC50, ppm
Methane - (74-82-8)	No data available.	No data available.	No data available.	No data available.	No data available.
Ethane - (74-84-0)	No data available.	No data available.	No data available.	No data available.	No data available.
Propane - (74-98-6)	No data available.	No data available.	658.00, Rat - Category: NA	No data available.	No data available.
Carbon dioxide - (124-38-9)	No data available.	No data available.	No data available.	No data available.	No data available.
Nitrogen - (7727-37-9)	No data available.	No data available.	No data available.	No data available.	No data available.
Isobutane - (75-28-5)	No data available.	No data available.	658.00, Rat - Category: NA	No data available.	No data available.
2-Methylbutane - (78-78-4)	No data available.	No data available.	No data available.	No data available.	No data available.

Butane - (106-97-8)	No data available.	No data available.	658.00, Rat - Category: NA	No data available.	No data available.
Pentane - (109-66-0)	5,000.00, Mouse - Category: 5	3,000.00, Rabbit - Category: 5	364.00, Rat - Category: NA	No data available.	No data available.
Helium - (7440-59-7)	No data available.	No data available.	No data available.	No data available.	No data available.

Carcinogen Data

CAS No.	Ingredient	Source	Value
74-82-8	Methane	IARC	No
		ACGIH	No Established Limit
74-84-0	Ethane	IARC	No
		ACGIH	No Established Limit
74-98-6	Propane	IARC	No
		ACGIH	No Established Limit
75-28-5	Isobutane	IARC	No
		ACGIH	No Established Limit
78-78-4	2-Methylbutane	IARC	No
		ACGIH	No Established Limit
106-97-8	Butane	IARC	No
		ACGIH	No Established Limit
109-66-0	Pentane	IARC	No
		ACGIH	No Established Limit
124-38-9	Carbon dioxide	IARC	No
		ACGIH	No Established Limit
7440-59-7	Helium	IARC	No
		ACGIH	No Established Limit
7727-37-9	Nitrogen	IARC	No
		ACGIH	No Established Limit

Classification	Category	Hazard Description
Acute toxicity (oral)	---	Not Applicable
Acute toxicity (dermal)	---	Not Applicable
Acute toxicity (inhalation)	---	Not Applicable
Skin corrosion/irritation	---	Not Applicable
Serious eye damage/irritation	---	Not Applicable
Respiratory sensitization	---	Not Applicable
Skin sensitization	---	Not Applicable
Germ cell mutagenicity	---	Not Applicable
Carcinogenicity	---	Not Applicable
Reproductive toxicity	---	Not Applicable
STOT-single exposure	---	Not Applicable
STOT-repeated exposure	---	Not Applicable
Aspiration hazard	---	Not Applicable

Possible routes of entry:

Inhalation, ingestion, skin contact, and skin absorption.

Symptoms and effects, both acute and delayed:

No specific symptom data available.

No chronic toxicity or long term toxicity information available. Treat symptomatically.

Section 12. Ecological information

Toxicity

Harmful to aquatic life with long lasting effects.

Aquatic Ecotoxicity

Ingredient	96 hr LC50 fish, mg/L	48 hr EC50 crustacea, mg/L	ErC50 algae, mg/L
Methane - (74-82-8)	No data available.	No data available.	No data available.
Ethane - (74-84-0)	No data available.	No data available.	No data available.
Propane - (74-98-6)	49.90, Fish	69.43, Daphnia sp	19.37, Algae
Carbon dioxide - (124-38-9)	No data available.	No data available.	No data available.
Nitrogen - (7727-37-9)	No data available.	No data available.	No data available.
Isobutane - (75-28-5)	No data available.	No data available.	No data available.
2-Methylbutane - (78-78-4)	No data available.	No data available.	No data available.
Butane - (106-97-8)	49.90, Fish (Piscis)	69.43, Daphnia sp	19.37, Algae
Pentane - (109-66-0)	100.00, Oncorhynchus kisutch	9.74, Daphnia magna	No data available.
Helium - (7440-59-7)	No data available.	No data available.	No data available.

Persistence and degradability

There is no data available on the preparation itself.

Bioaccumulative potential

Not Available

Mobility in soil

No data available.

Results of PBT and vPvB assessment

This product contains no PBT/vPvB/vPvM chemicals.

Other adverse effects

No data available.

Section 13. Disposal considerations

Waste treatment methods

Waste should not be released to sewers. Observe all federal, state, and local regulations when disposing of this substance.

Section 14. Transport information



	DOT (Domestic Surface Transportation)	TDG (Domestic Surface Transportation)
UN number	UN1971	UN1971
UN proper shipping name	Methane, compressed or Natural gas, compressed (with high methane content)	Methane, compressed or Natural gas, compressed (with high methane content)
Transport hazard class(es)	Class: 2.1	Class: 2.1 Sub Class: Not Applicable
Packing group	Not Applicable	Not Applicable
	IMO / IMDG (Ocean Transportation)	ICAO/IATA
UN number	UN1971	UN1971
UN proper shipping name	Methane, compressed or Natural gas, compressed (with high methane content)	Methane, compressed or Natural gas, compressed (with high methane content)
Transport hazard class(es)	Class: 2.1 Sub Class: Not Applicable	Class: 2.1 Sub Class: Not Applicable
Packing group	Not Applicable	Not Applicable

Environmental hazards

IMDG Marine Pollutant: No;

Special precautions for user

Not Applicable

Section 15. Regulatory information

Regulatory Overview The regulatory data in Section 15 is not intended to be all-inclusive, only selected regulations are represented.

This product has been classified in accordance with US OSHA's Hazard Communication Standard (1910.1200) revised 2024 and Canadian Hazardous Products Regulations (SOR/2015-17 amended 2022-12-15) (GHS revision 7) and the SDS contains all of the information required by those regulations.

Toxic Substance Control Act (TSCA)

2-Methylbutane
Butane
Carbon dioxide
Ethane
Helium
Isobutane

Methane
Nitrogen
Pentane
Propane

EPCRA 302 Extremely Hazardous:

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

EPCRA 313 Toxic Chemicals:

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Canadian Domestic Substance List (DSL):

2-Methylbutane
Butane
Carbon dioxide
Ethane
Helium
Isobutane
Methane
Nitrogen
Pentane
Propane

Canadian Non-Domestic Substance List (NDSL):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Carcinogens (>0.0%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Developmental Toxins (>0.0%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Female Repro Toxins (>0.0%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Male Repro Toxins (>0.0%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 Label Warning:

This product contains no chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

Section 16. Other information**Revision Date** 9 December, 2025

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein. We accept no responsibility and disclaim all liability for any harmful effects which may be caused by exposure to our products. Customers/users of this product must comply with all applicable health and safety laws, regulations, and orders.

The full text of the phrases appearing in section 3 is:

H220 Extremely flammable gas.

H224 Extremely flammable liquid and vapor.

H225 Highly flammable liquid and vapor.

H280 Contains gas under pressure; may explode if heated.

H304 May be fatal if swallowed and enters airways.

H336 May cause drowsiness and dizziness.

H411 Toxic to aquatic life with long lasting effects.

Disclaimer:

The information contained in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. It is the user's responsibility to satisfy oneself as to the suitability and completeness of this information for their own particular use.

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