

SAFETY DATA SHEET
Section 1: IDENTIFICATION

Product Name: Natural Gas (Pipeline Quality)
Synonyms: Not available.
Product Use: Fuel.
Restrictions on Use: Not available.
Manufacturer/Supplier: FortisBC
16705 Fraser Highway
Surrey, BC V3S 2X7
Phone Number: (604)576-7000
Emergency Phone: (800)663-9911
Date of Review of SDS: June 14, 2022

Section 2: HAZARD(S) IDENTIFICATION
GHS INFORMATION

Classification: Flammable Gases, Category 1
Gases Under Pressure - Compressed Gas
Simple Asphyxiant, Category 1

LABEL ELEMENTS
Hazard
Pictogram(s):


Signal Word: Danger

Hazard Statements: Extremely flammable gas.
Contains gas under pressure; may explode if heated.
May displace oxygen and cause rapid suffocation.

Precautionary Statements

Prevention: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Response: Leaking gas fire: Do not extinguish, unless leak can be stopped safely.
In case of leakage, eliminate all ignition sources.

Storage: Store in a well-ventilated place.
Protect from sunlight.

Disposal: Not applicable.

Hazards Not Otherwise Classified: Not applicable.

Ingredients with Unknown Toxicity: None.

This material is considered hazardous by the OSHA Hazard Communication Standard, (29 CFR 1910.1200). This material is considered hazardous by the Hazardous Products Regulations.

Section 3: COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous Ingredient(s)	Common name / Synonyms	CAS No.	% vol./vol.
Natural gas	Not available.	8006-14-2	100
Methane	Not available.	74-82-8	87-91
Ethane	Not available.	74-84-0	6-8
Propane	Not available.	74-98-6	1-2

* This product may contain 3 ppm Mercaptans.

Section 4: FIRST-AID MEASURES

Inhalation:	<p>If inhaled: Call a poison center or doctor if you feel unwell.</p> <p>Acute and delayed symptoms and effects: May displace oxygen and cause rapid suffocation. Central nervous system depression can occur if product is present in concentrations that will reduce the oxygen content of air below 18 % (vol). Symptoms may include headache, lightheadedness, drowsiness, disorientation, vomiting and seizures. Unconsciousness and death may occur with severe oxygen deprivation. May cause respiratory irritation. Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain. Acute inhalation of Mercaptans may cause restlessness, increased respiration, muscular weakness progressing to paralysis, convulsions, respiratory depression deficient oxygenation of the blood (cyanosis), and death due to respiratory paralysis.</p>
Eye Contact:	<p>If in eyes: Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center or doctor.</p> <p>Acute and delayed symptoms and effects: Contact with high pressure gas may cause injury. Permanent eye damage or blindness could result. May cause eye irritation. Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision.</p>
Skin Contact:	<p>Not a normal route of exposure.</p> <p>Acute and delayed symptoms and effects: Not a normal route of exposure.</p>
Ingestion:	<p>Not a normal route of exposure.</p> <p>Acute and delayed symptoms and effects: Not a normal route of exposure.</p>
General Advice:	<p>In case of accident or if you feel unwell, seek medical advice immediately (show the label or SDS where possible).</p>
Note to Physicians:	<p>Symptoms may not appear immediately.</p>

Section 5: FIRE-FIGHTING MEASURES
FLAMMABILITY AND EXPLOSION INFORMATION

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. Methane is lighter than air and will rise. Vapors may travel to source of ignition and flash back. Cylinders exposed to fire

SAFETY DATA SHEET

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.

Sensitivity to Mechanical Impact: This material is not sensitive to mechanical impact.

Sensitivity to Static Discharge: This material is sensitive to static discharge.

MEANS OF EXTINCTION

Suitable 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.

Unsuitable Extinguishing Media: Not available.

Products of Combustion: Oxides of carbon. Oxides of sulphur.

Protection of Firefighters: Leaking gas fire: Do not extinguish, unless leak can be stopped safely. In case of leakage, eliminate all ignition sources. Vapors may cause dizziness or asphyxiation without warning. Some may be irritating if inhaled at high concentrations. 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.

Section 6: ACCIDENTAL RELEASE MEASURES

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.

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

Environmental Precautions: Not normally required.

Methods for Containment: 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.

Methods for Clean-Up: Prevent spreading of vapors through sewers, ventilation systems and confined areas. Isolate area until gas has dispersed.

Other Information: See Section 13 for disposal considerations.

Section 7: HANDLING AND STORAGE

Handling:

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not pierce or burn, even after use. See Section 8 for information on Personal Protective Equipment.

Storage:

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.

Section 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines

Component

Natural gas [CAS No. 8006-14-2]

ACGIH: Simple asphyxiant; Explosion hazard

OSHA: No PEL established.

British Columbia: Simple asphyxiant, Explosion hazard

Methane [CAS No. 74-82-8]

ACGIH: Simple asphyxiant; Explosion hazard

OSHA: No PEL established.

British Columbia: Simple asphyxiant, Explosion hazard

Ethane [CAS No. 74-84-0]

ACGIH: Simple asphyxiant; Explosion hazard

OSHA: No PEL established.

British Columbia: Simple asphyxiant, Explosion hazard

Propane [CAS No. 74-98-6]

ACGIH: Simple asphyxiant; Explosion hazard

OSHA: 1000 ppm (TWA), 1800 mg/m³ (TWA);

British Columbia: Simple asphyxiant, Explosion hazard

Mercaptans [CAS No. (various)]

ACGIH: 0.5 ppm (TWA); (2019); For Methyl mercaptan

OSHA: 10 ppm (C), 20 mg/m³ (C); For Methyl mercaptan
0.5 ppm (TWA) [Vacated];

British Columbia: 0.5 ppm (TWA)

PEL: Permissible Exposure Limit

TWA: Time-Weighted Average

SAFETY DATA SHEET
C: Ceiling

Natural Gas (Pipeline Quality)

Date of Preparation: June 13, 2017

Date of Review: June 14, 2022

Engineering Controls: Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapour, gas, etc.) below recommended exposure limits.

PERSONAL PROTECTIVE EQUIPMENT (PPE)


Eye/Face Protection: Wear safety glasses. Use equipment for eye protection that meets the standards referenced by CSA Standard CAN/CSA-Z94.3-92 and OSHA regulations in 29 CFR 1910.133 for Personal Protective Equipment.

Hand Protection: Wear protective gloves. Consult manufacturer specifications for further information.

Skin and Body Protection: Wear protective clothing. Flame resistant clothing that meets the NFPA 2112 and CAN/CGSB 155.20 standards is recommended in areas where material is stored or handled.

Respiratory Protection: 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-Z94.4-11, 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.

General Hygiene Considerations: Handle according to established industrial hygiene and safety practices. Consult a competent industrial hygienist to determine hazard potential and/or the PPE manufacturers to ensure adequate protection.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Compressed gas.
Colour:	Colourless.
Odour:	Odourless. Mercaptan.
Odour Threshold:	1 ppb (Methyl mercaptan)
Physical State:	Gas.
pH:	Not available.
Melting Point / Freezing Point:	-183 °C (-297.4 °F) (Methane)
Initial Boiling Point:	-161 °C (-257.8 °F)

Natural Gas (Pipeline Quality)

Date of Preparation: June 13, 2017

Date of Review: June 14, 2022

SAFETY DATA SHEET

Boiling Range:	Not available.
Flash Point:	Not available.
Evaporation Rate:	Not available.
Flammability (solid, gas):	Extremely flammable gas.
Lower Flammability Limit:	5 % (Methane)
Upper Flammability Limit:	15 % (Methane)
Vapor Pressure:	Not available.
Vapor Density:	Not available.
Relative Density:	Not available.
Solubilities:	Slightly soluble in water.
Partition Coefficient: n-Octanol/Water:	Not available.
Auto-ignition Temperature:	537 °C (998.6 °F) (Methane)
Decomposition Temperature:	Not available.
Viscosity:	Not available.
Percent Volatile, wt. %:	100
VOC content, wt. %:	Not available.
Density:	Not available.
Coefficient of Water/Oil Distribution:	Not available.

Section 10: STABILITY AND REACTIVITY

Reactivity:	Contact with incompatible materials. Sources of ignition. Exposure to heat.
Chemical Stability:	Stable under normal storage conditions.
Possibility of Hazardous Reactions:	None known.
Conditions to Avoid:	Contact with incompatible materials. Sources of ignition. Exposure to heat.
Incompatible Materials:	Oxidizers.
Hazardous Decomposition Products:	Not available.

Section 11: TOXICOLOGICAL INFORMATION
EFFECTS OF ACUTE EXPOSURE
Product Toxicity

Oral: Not available.

Dermal: Not available.

Inhalation: Not available.

Component Toxicity

Component	CAS No.	LD₅₀ oral	LD₅₀ dermal	LC₅₀
Natural gas	8006-14-2	Not available.	Not available.	Not available.
Methane	74-82-8	Not available.	Not available.	Not available.
Ethane	74-84-0	Not available.	Not available.	Not available.
Propane	74-98-6	Not available.	Not available.	Not available.

Likely Routes of Exposure: Eye contact. Skin contact. Inhalation.

Target Organs: Skin. Eyes. Respiratory system. Blood. Liver. Kidneys. Central nervous system.

Symptoms (including delayed and immediate effects)

Inhalation: May displace oxygen and cause rapid suffocation. Central nervous system depression can occur if product is present in concentrations that will reduce the oxygen content of air below 18 % (vol). Symptoms may include headache, lightheadedness, drowsiness, disorientation, vomiting and seizures. Unconsciousness and death may occur with severe oxygen deprivation. May cause respiratory irritation. Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain. Acute inhalation of Mercaptans may cause restlessness, increased respiration, muscular weakness progressing to paralysis, convulsions, respiratory depression deficient oxygenation of the blood (cyanosis), and death due to respiratory paralysis.

Eye: Contact with high pressure gas may cause injury. Permanent eye damage or blindness could result. May cause eye irritation. Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision.

Skin: Not a normal route of exposure.

Ingestion: Not a normal route of exposure.

Skin Sensitization: Not available.

Respiratory Sensitization: Not available.

Medical Conditions Not available.

Aggravated By Exposure:

EFFECTS OF CHRONIC EXPOSURE (from short and long-term exposure)

Target Organs: Skin. Eyes. Respiratory system. Lungs. Blood. Liver. Kidneys. Central nervous system.

Chronic Effects: Prolonged exposure to Natural gas can lead to hypoxia, bluish colouration to the skin, numbness, damage to the nervous system,

SAFETY DATA SHEET

heart sensitization, reduced consciousness and death.

Carcinogenicity: This product does not contain any carcinogens or potential carcinogens as listed by ACGIH, IARC, OSHA, or NTP.

Mutagenicity: Methyl mercaptan has been shown to cause genetic changes in experimental assays on animals.

Reproductive Effects: Not available.

Developmental Effects

Teratogenicity: Not available.

Embryotoxicity: Not available.

Toxicologically Synergistic Materials: Not available.

Section 12: ECOLOGICAL INFORMATION

Ecotoxicity: Not available.

Persistence / Degradability: Not available.

Bioaccumulation / Accumulation: Not available.

Mobility in Environment: Not available.

Other Adverse Effects: Not available.

Section 13: DISPOSAL CONSIDERATIONS

Disposal Instructions: Disposal should be in accordance with applicable regional, national and local laws and regulations. Local regulations may be more stringent than regional or national requirements.

Section 14: TRANSPORT INFORMATION
U.S. Department of Transportation (DOT)

Proper Shipping Name: UN1971, NATURAL GAS, COMPRESSED, 2.1

Class: 2.1

UN Number: UN1971

Packing Group: Not applicable.

Label Code:



SAFETY DATA SHEET
Canada Transportation of Dangerous Goods (TDG)
Proper Shipping Name: UN1971, NATURAL GAS, COMPRESSED, 2.1

Class: 2.1

UN Number: UN1971

Packing Group: Not applicable.

Label Code:

Section 15: REGULATORY INFORMATION
Chemical Inventories
US (TSCA)

The components of this product are in compliance with the chemical notification requirements of TSCA.

Canada (DSL)

The components of this product are in compliance with the chemical notification requirements of the NSN Regulations under CEPA, 1999.

Federal Regulations
United States

This SDS has been prepared to meet the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200.

SARA Title III

Component	Section 302 (EHS) TPQ (lbs.)	Section 304 EHS RQ (lbs.)	CERCLA RQ (lbs.)	Section 313	RCRA CODE	CAA 112(r) TQ (lbs.)
Methane	Not listed.	Not listed.	Not listed.	Not listed.	Not listed.	10000
Ethane	Not listed.	Not listed.	Not listed.	Not listed.	Not listed.	10000
Propane	Not listed.	Not listed.	Not listed.	Not listed.	Not listed.	10000

State Regulations
Massachusetts

US Massachusetts Commonwealth's Right-to-Know Law (Appendix A to 105 Code of Massachusetts Regulations Section 670.000)

Component	CAS No.	RTK List
Natural gas	8006-14-2	Listed.
Methane	74-82-8	Listed.
Ethane	74-84-0	Listed.
Propane	74-98-6	Listed.

SAFETY DATA SHEET**Natural Gas (Pipeline Quality)**

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New Jersey

US New Jersey Worker and Community Right-to-Know Act (New Jersey Statute Annotated
Section 34:5A-5)

Component	CAS No.	RTK List
Methane	74-82-8	SHHS
Ethane	74-84-0	SHHS
Propane	74-98-6	SHHS

Note: SHHS = Special Health Hazard Substance

Pennsylvania

US Pennsylvania Worker and Community Right-to-Know Law (34 Pa. Code Chap. 301-323)

Component	CAS No.	RTK List
Natural gas	8006-14-2	Listed.
Methane	74-82-8	Listed.
Ethane	74-84-0	Listed.
Propane	74-98-6	Listed.

California

California Prop 65: This product does not contain chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

Section 16: OTHER INFORMATION**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.

Date of Review: June 14, 2022
Reviewed By: Omid Nobakht, CIH
Version: 2.0
Date of Preparation of SDS: June 13, 2017
GHS SDS Prepared by: **Deerfoot Consulting Inc.**
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