

**Section 1: IDENTIFICATION**

**Product Name:** Ethane Plus  
**Synonyms:** C2+.  
**Product Use:** Refinery feedstock.  
**Restrictions on Use:** Not available.  
**Manufacturer/Supplier:** Pembina Pipeline Corporation  
4000, 585 - 8th Avenue SW  
Calgary, Alberta T2P 1G1  
**Emergency Phone:** 1-800-360-4706  
**Date of Preparation of SDS:** September 14, 2016

**Section 2: HAZARD(S) IDENTIFICATION****GHS INFORMATION**

**Classification:** Flammable Gases, Category 1  
Gases Under Pressure - Compressed Gas  
Germ Cell Mutagenicity, Category 1B  
Carcinogenicity, Category 1A  
Toxic to Reproduction, Category 2  
Specific Target Organ Toxicity (Repeated Exposure), Category 2  
Simple Asphyxiant

**LABEL ELEMENTS****Hazard****Pictogram(s):****Signal Word:** Danger

**Hazard Statements:** Extremely flammable gas.  
Contains gas under pressure; may explode if heated.  
May cause genetic defects.  
May cause cancer.  
Suspected of damaging fertility or the unborn child.  
May cause damage to organs through prolonged or repeated exposure.  
May displace oxygen and cause rapid suffocation.

**Precautionary Statements**

**Prevention:** Obtain special instructions before use.  
Do not handle until all safety precautions have been read and understood.  
Keep away from heat, sparks, open flames, and hot surfaces. – No smoking.  
Do not breathe gas.  
Wear protective gloves, protective clothing and eye protection.

**Response:** If exposed or concerned: Get medical advice/attention.  
Get medical advice/attention if you feel unwell.  
Leaking gas fire: Do not extinguish, unless leak can be stopped safely.  
Eliminate all ignition sources if safe to do so.

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

**Disposal:** Dispose of contents/container in accordance with applicable regional, national and local laws and regulations.

**Hazards Not Otherwise Classified:** Not applicable.

**Ingredients with Unknown Toxicity:** 5% of this product mixture consists of ingredient(s) of unknown acute toxicity.

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.
Ethane	Not available.	74-84-0	40 - 70
Propane	Not available.	74-98-6	10 - 30
Butane	Not available.	106-97-8	7 - 13
Propane, 2-methyl-	Isobutane	75-28-5	3 - 7
Pentane	Not available.	109-66-0	1 - 5
Butane, 2-methyl-	Isopentane	78-78-4	1 - 5
Hexane	Not available.	110-54-3	1 - 5
Carbon dioxide	Not available.	124-38-9	1 - 2
Benzene	Not available.	71-43-2	0.1 - 0.5
Benzene, methyl-	Toluene	108-88-3	0.1 - 0.5
Benzene, dimethyl-	Xylene	1330-20-7	0.1 - 0.5
Hazardous Ingredient(s)	Common name / Synonyms	CAS No.	ppm (vol.)
Hydrogen sulfide (H <sub>2</sub> S)	Hydrogen sulphide	7783-06-4	< 10

**Section 4: FIRST-AID MEASURES**

**Inhalation:** If inhaled: Call a poison center or doctor if you feel unwell.

**Acute and delayed symptoms and effects:** May displace oxygen and cause rapid suffocation. May cause respiratory irritation. Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain. This product may contain small amounts of Hydrogen sulphide. Inhalation of Hydrogen sulphide may cause loss of sense of smell, major irritation of the respiratory tract, headache, nausea, vomiting, dizziness, and fluid buildup in the lungs (pulmonary edema), which can be fatal. At 300 ppm unconsciousness may occur after 20 minutes. From 300 to 500 ppm, death can occur within 1 to 4 hours of continuous exposure. At 500 ppm the respiratory system is paralyzed, the victim collapses almost instantaneously, and death can occur after exposure of only 30 to 60 minutes. Above 500 ppm Hydrogen sulphide may cause immediate loss of consciousness; death is rapid, and possibly immediate.

**Eye Contact:** 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.

**Acute and delayed symptoms and effects:** Contact with rapidly expanding or liquefied gas may cause irritation and/or frostbite. The pain after contact with liquid can quickly subside. Permanent eye damage or blindness could result. May cause eye irritation. Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision. Hydrogen sulphide may cause eye irritation at 1-20 ppm and acute conjunctivitis at higher concentrations.

**Skin Contact:** Contact with rapidly expanding or liquefied gas may cause irritation and/or frostbite. If on skin: Wash with plenty of soap and water. Get immediate medical advice/attention. Thaw frosted parts with lukewarm water. Do not rub affected area. Remove non-adhering contaminated clothing. Do not remove adherent material or clothing.

**Acute and delayed symptoms and effects:** Contact with rapidly expanding or liquefied gas may cause irritation and/or frostbite. Symptoms of frostbite include change in skin color to white or grayish-yellow. The pain after contact with liquid can quickly subside. May cause skin irritation. Signs/symptoms may include localized redness, swelling, and itching.

**Ingestion:** Not a normal route of exposure.

**Acute and delayed symptoms and effects:** Not a normal route of exposure.

**General Advice:** In case of accident or if you feel unwell, seek medical advice immediately (show the label or SDS where possible).

**Note to Physicians:** Symptoms may not appear immediately. For inhalation of Hydrogen Sulphide, consider oxygen.

## 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. Vapors from liquefied gas are initially heavier than air and spread along ground. 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.

**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**

<b>Suitable Extinguishing Media:</b>	Small Fire: Dry chemical or CO <sub>2</sub> . Large Fire: Water spray or fog. Move containers from fire area if you can do it without risk.
<b>Unsuitable Extinguishing Media:</b>	Not available.
<b>Products of Combustion:</b>	Oxides of carbon. Oxides of sulphur.
<b>Protection of Firefighters:</b>	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. Hydrogen sulphide is heavier than air and may collect in low lying areas and confined spaces. 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.

**Section 6: ACCIDENTAL RELEASE MEASURES**

<b>Emergency Procedures:</b>	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.
<b>Personal Precautions:</b>	Do not touch or walk through spilled material. Use personal protection recommended in Section 8. Don full-face, positive pressure, self-contained breathing apparatus.
<b>Environmental Precautions:</b>	Not normally required.
<b>Methods for Containment:</b>	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.
<b>Methods for Clean-Up:</b>	Prevent spreading of vapors through sewers, ventilation systems and confined areas. Isolate area until gas has dispersed. CAUTION: When in contact with refrigerated/cryogenic liquids, many materials become brittle and are likely to break without warning.
<b>Other Information:</b>	See Section 13 for disposal considerations.

**Section 7: HANDLING AND STORAGE****Handling:**

Do not breathe gas. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat, sparks, open flames, and hot surfaces. – No smoking. Pressurized container: Do not pierce or burn, even after use. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. See Section 8 for information on Personal Protective Equipment.

**Storage:**

Store in a well-ventilated place. Store locked up. 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**

Ethane [CAS No. 74-84-0]

**ACGIH:** Asphyxia

**OSHA:** No PEL established.

Propane [CAS No. 74-98-6]

**ACGIH:** Asphyxia

**OSHA:** 1000 ppm (TWA), 1800 mg/m<sup>3</sup> (TWA)

Butane [CAS No. 106-97-8]

**ACGIH:** 1000 ppm (TWA); (2012)

**OSHA:** 800 ppm (TWA) [Vacated];

Isobutane [CAS No. 75-28-5]

**ACGIH:** 1000 ppm (TWA); (2012)

**OSHA:** No PEL established.

Pentane [CAS No. 109-66-0]

**ACGIH:** 1000 ppm (TWA); (2013)

**OSHA:** 1000 ppm (TWA), 2950 mg/m<sup>3</sup> (TWA);  
600 ppm (TWA); 750 ppm (STEL) [Vacated];

Isopentane [CAS No. 78-78-4]

**ACGIH:** 1000 ppm (TWA); (2013)

**OSHA:** No PEL established.

Hexane [CAS No. 110-54-3]

**ACGIH:** 50 ppm (TWA); Skin, BEI (1996)

**OSHA:** 500 ppm (TWA), 1800 mg/m<sup>3</sup> (TWA); Skin.  
50 ppm (TWA) [Vacated];

Carbon dioxide [CAS No. 124-38-9]

**ACGIH:** 5000 ppm (TWA); 30000 ppm (STEL); (1983)

**OSHA:** 5000 ppm (TWA), 9000 mg/m<sup>3</sup> (TWA);

Benzene [CAS No. 71-43-2]

**ACGIH:** 0.5 ppm (TWA); 2.5 ppm (STEL); Skin; A1; BEI (1996)

**OSHA:** 1 ppm (TWA); 5 ppm (STEL);

Toluene [CAS No. 108-88-3]

**ACGIH:** 20 ppm (TWA); A4; BEI (2006)

**OSHA:** 200 ppm (TWA); 300 ppm (C); 500 ppm (Peak) (Maximum duration: 10 minutes.)  
100 ppm (TWA); 150 ppm (STEL) [Vacated];

Xylene [CAS No. 1330-20-7]

**ACGIH:** 100 ppm (TWA); 150 ppm (STEL); A4; BEI (1992)

**OSHA:** 100 ppm (TWA), 435 mg/m<sup>3</sup> (TWA);  
150 ppm (STEL) [Vacated]

Hydrogen sulphide [CAS No. 7783-06-4]

**ACGIH:** 1 ppm (TWA); 5 ppm (STEL); (2009);

**OSHA:** 20 ppm (C); 50 ppm (Peak) (Maximum duration: 10 mins. once only if no other  
meas. exp. occurs.)  
10 ppm (TWA); 15 ppm (STEL) [Vacated];

**PEL:** Permissible Exposure Limit

**TWA:** Time-Weighted Average

**STEL:** Short-Term Exposure Limit

**C:** Ceiling

**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. Wear cold insulating gloves. Consult manufacturer specifications for further information.

**Skin and Body Protection:**

Wear protective clothing.

**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**

<b>Appearance:</b>	Compressed gas.
<b>Colour:</b>	Colourless.
<b>Odour:</b>	Slight hydrocarbon.
<b>Odour Threshold:</b>	Not available.
<b>Physical State:</b>	Gas.
<b>pH:</b>	Not available.
<b>Melting Point / Freezing Point:</b>	Not available.
<b>Initial Boiling Point:</b>	Not available.
<b>Boiling Range:</b>	-89 °C (-128.2 °F) (Ethane)
<b>Flash Point:</b>	Not available.
<b>Evaporation Rate:</b>	Not available.
<b>Flammability (solid, gas):</b>	Extremely flammable gas.
<b>Lower Flammability Limit:</b>	3 % (Ethane)
<b>Upper Flammability Limit:</b>	12.5 % (Ethane)
<b>Vapor Pressure:</b>	3000 to 4600 kPa at 40 °C (104 °F) (GPA 2145M)
<b>Vapor Density:</b>	Not available.
<b>Relative Density:</b>	0.400 to 0.500 (Water = 1) at 15 °C (59 °F)
<b>Solubilities:</b>	Slightly soluble in water.
<b>Partition Coefficient: n-Octanol/Water:</b>	Not available.
<b>Auto-ignition Temperature:</b>	Not available.
<b>Decomposition Temperature:</b>	Not available.
<b>Viscosity:</b>	Not available.
<b>Percent Volatile, wt. %:</b>	100
<b>VOC content, wt. %:</b>	Not available.
<b>Density:</b>	Not available.
<b>Coefficient of Water/Oil Distribution:</b>	Not available.

**Section 10: STABILITY AND REACTIVITY**

<b>Reactivity:</b>	Contact with incompatible materials. Sources of ignition. Exposure to heat.
<b>Chemical Stability:</b>	Stable under normal storage conditions.
<b>Possibility of Hazardous Reactions:</b>	Not available.
<b>Conditions to Avoid:</b>	Contact with incompatible materials. Sources of ignition. Exposure to heat.
<b>Incompatible Materials:</b>	Oxidizers.
<b>Hazardous Decomposition Products:</b>	Not available.

**Section 11: TOXICOLOGICAL INFORMATION**
**EFFECTS OF ACUTE EXPOSURE**
**Product Toxicity**

<b>Oral:</b>	Not available.
<b>Dermal:</b>	Not available.
<b>Inhalation:</b>	Not available.

**Component Toxicity**

Component	CAS No.	LD <sub>50</sub> oral	LD <sub>50</sub> dermal	LC <sub>50</sub>
Ethane	74-84-0	Not available.	Not available.	Not available.
Propane	74-98-6	Not available.	Not available.	Not available.
Butane	106-97-8	Not available.	Not available.	658000 mg/m <sup>3</sup> (rat); 4H
Isobutane	75-28-5	Not available.	Not available.	570000 ppm (rat); 15M
Pentane	109-66-0	400 mg/kg (rat)	Not available.	364000 mg/m <sup>3</sup> (rat); 4H
Isopentane	78-78-4	Not available.	Not available.	Not available.
Hexane	110-54-3	25000 mg/kg (rat)	Not available.	48000 ppm (rat); 4H
Carbon dioxide	124-38-9	Not available.	Not available.	Not available.
Benzene	71-43-2	930 mg/kg (rat)	> 9400 µL/kg (rabbit)	10000 ppm (rat); 7H
Toluene	108-88-3	2600 mg/kg (rat)	14.1 mL/kg (rabbit)	49000 mg/m <sup>3</sup> (rat); 4H
Xylene	1330-20-7	4300 mg/kg (rat)	> 1700 mg/kg (rabbit)	5000 ppm (rat); 4H
Hydrogen sulphide	7783-06-4	Not available.	Not available.	444 ppm (rat); 4H

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

**Target Organs:** Skin. Eyes. Respiratory system. Lungs. Blood. Cardiovascular system. Bone marrow. Liver. Kidneys. Central nervous system. Peripheral nervous system.

**Symptoms (including delayed and immediate effects)**

**Inhalation:** May displace oxygen and cause rapid suffocation. May cause respiratory irritation. Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain. This product may contain small amounts of Hydrogen sulphide. Inhalation of Hydrogen sulphide may cause loss of sense of



smell, major irritation of the respiratory tract, headache, nausea, vomiting, dizziness, and fluid buildup in the lungs (pulmonary edema), which can be fatal. At 300 ppm unconsciousness may occur after 20 minutes. From 300 to 500 ppm, death can occur within 1 to 4 hours of continuous exposure. At 500 ppm the respiratory system is paralyzed, the victim collapses almost instantaneously, and death can occur after exposure of only 30 to 60 minutes. Above 500 ppm Hydrogen sulphide may cause immediate loss of consciousness; death is rapid, and possibly immediate.

**Eye:** Contact with rapidly expanding or liquefied gas may cause irritation and/or frostbite. The pain after contact with liquid can quickly subside. Permanent eye damage or blindness could result. May cause eye irritation. Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision. Hydrogen sulphide may cause eye irritation at 1-20 ppm and acute conjunctivitis at higher concentrations.

**Skin:** Contact with rapidly expanding or liquefied gas may cause irritation and/or frostbite. Symptoms of frostbite include change in skin color to white or grayish-yellow. The pain after contact with liquid can quickly subside. May cause skin irritation. Signs/symptoms may include localized redness, swelling, and itching.

**Ingestion:** Not a normal route of exposure.

**Skin Sensitization:** Not available.

**Respiratory Sensitization:** Not available.

**Medical Conditions Aggravated By Exposure:** Not available.

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

**Target Organs:** Skin. Eyes. Respiratory system. Lungs. Blood. Cardiovascular system. Bone marrow. Liver. Kidneys. Central nervous system. Peripheral nervous system.

**Chronic Effects:** Hazardous by OSHA/WHMIS criteria. May cause chronic effects. Prolonged or repeated inhalation of Isopentane may cause dizziness, weakness, weight loss, anemia, nervousness, pains in the limbs and peripheral numbness. Chronic inhalation of n-Hexane may cause peripheral nerve disorders and central nervous system effects. Reports of chronic poisoning with Benzene, Toluene or Xylene describe anemia, decreased blood cell count and bone marrow hypoplasia. Liver and kidney damage may occur. Repeated exposure of the eyes to high concentrations of Xylenes vapour may cause reversible eye damage. Chronic inhalation exposure to xylene causes mid-frequency hearing loss in laboratory animals. Xylene reacts synergistically with n-hexane to enhance hearing loss. Immunodepressive effects have also been reported for Benzene. Hydrogen sulphide may reduce lung function; cause neurological effects such as headaches, nausea, depression and personality changes; eye and mucous membrane irritation; and damage to cardiovascular system.

**Carcinogenicity:** May cause cancer. Chronic exposure to benzene has been associated with an increased incidence of leukemia and multiple myeloma (tumour composed of cells of the type normally found in the bone marrow).

**Component Carcinogenicity**

Component	ACGIH	IARC	NTP	OSHA	Prop 65
Benzene	A1	Group 1	List 1	OSHA Carcinogen.	Listed.
Toluene	A4	Group 3	Not listed.	Not listed.	Not listed.
Xylene	A4	Group 3	Not listed.	Not listed.	Not listed.

**Mutagenicity:** May cause genetic defects.

**Reproductive Effects:** Suspected of damaging fertility or the unborn child.

**Developmental Effects**

**Teratogenicity:** Not available.

**Embryotoxicity:** Possible risk of harm to the unborn child. Benzene and Xylene have caused adverse fetal effects in laboratory animals. Exposure to Toluene may affect the developing fetus.

**Toxicologically Synergistic Materials:** Xylene reacts synergistically with n-hexane to enhance hearing loss.

**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:** UN1075, PETROLEUM GASES, LIQUEFIED, 2.1

**Class:** 2.1

**UN Number:** UN1075

**Packing Group:** Not applicable.

**Label Code:**



**Canada Transportation of Dangerous Goods (TDG)**
**Proper Shipping Name:** UN1075, PETROLEUM GASES, LIQUEFIED, 2.1

**Class:** 2.1

**UN Number:** UN1075

**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.)
Ethane	Not listed.	Not listed.	Not listed.	Not listed.	Not listed.	10000
Propane	Not listed.	Not listed.	Not listed.	Not listed.	Not listed.	10000
Butane	Not listed.	Not listed.	Not listed.	Not listed.	Not listed.	10000
Isobutane	Not listed.	Not listed.	Not listed.	Not listed.	Not listed.	10000
Pentane	Not listed.	Not listed.	Not listed.	Not listed.	Not listed.	10000
Isopentane	Not listed.	Not listed.	Not listed.	Not listed.	Not listed.	10000
Hexane	Not listed.	Not listed.	5000	313	Not listed.	Not listed.
Benzene	Not listed.	Not listed.	10	313	U019	Not listed.
Toluene	Not listed.	Not listed.	1000	313	U220	Not listed.
Xylene	Not listed.	Not listed.	100	313	U239	Not listed.
Hydrogen sulphide	500	100	100	313	U135	10000

**State Regulations****Massachusetts**

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

<b>Component</b>	<b>CAS No.</b>	<b>RTK List</b>
Ethane	74-84-0	Listed.
Propane	74-98-6	Listed.
Butane	106-97-8	Listed.
Isobutane	75-28-5	Listed.
Pentane	109-66-0	Listed.
Isopentane	78-78-4	Listed.
Hexane	110-54-3	Listed.
Carbon dioxide	124-38-9	Listed.
Benzene	71-43-2	E
Toluene	108-88-3	Listed.
Xylene	1330-20-7	Listed.
Hydrogen sulphide	7783-06-4	E

**Note:** E = Extraordinarily Hazardous Substance

**New Jersey**

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

<b>Component</b>	<b>CAS No.</b>	<b>RTK List</b>
Ethane	74-84-0	SHHS
Propane	74-98-6	SHHS
Butane	106-97-8	SHHS
Isobutane	75-28-5	SHHS
Pentane	109-66-0	SHHS
Isopentane	78-78-4	SHHS
Hexane	110-54-3	SHHS
Carbon dioxide	124-38-9	Listed.
Benzene	71-43-2	SHHS
Toluene	108-88-3	SHHS
Xylene	1330-20-7	SHHS
Hydrogen sulphide	7783-06-4	SHHS

**Note:** SHHS = Special Health Hazard Substance

**Pennsylvania**

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

<b>Component</b>	<b>CAS No.</b>	<b>RTK List</b>
Ethane	74-84-0	Listed.
Propane	74-98-6	Listed.
Butane	106-97-8	Listed.
Isobutane	75-28-5	Listed.
Pentane	109-66-0	Listed.
Isopentane	78-78-4	Listed.
Hexane	110-54-3	Listed.
Carbon dioxide	124-38-9	Listed.
Benzene	71-43-2	ES
Toluene	108-88-3	E



Xylene	1330-20-7	E
Hydrogen sulphide	7783-06-4	E

**Note:** E = Environmental Hazard; S = Special Hazardous Substance

**California**

**California Prop 65:** WARNING: This product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

<b>Component</b>	<b>Type of Toxicity</b>
Benzene	cancer; developmental, male
Toluene	developmental
Ethylbenzene	cancer

**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 his own particular use.

**Date of Preparation of SDS:** September 14, 2016

**Version:** 1.1

**GHS SDS Prepared by:** Deerfoot Consulting Inc.

**Phone: (403) 720-3700**