SAFETY DATA SHEET

Natural Gas

Section 1. Identification

GHS product identifier : Natural Gas

Product code : Not Available

Other means of identification : Methane, Sweet Gas, Fuel Gas, Pipeline Spec Gas, Sales Gas, Dry Natural Gas, Compressed Gas, CH4

Product type : Gas

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

Identified uses : Fuel

Manufacturer : Enbridge Inc. Including Enbridge Legal Entities: Algonquin Gas Transmission, LLC; Alliance Pipeline LP; Big Sandy Pipeline, LLC; Brazoria Interconnector Gas Pipeline, LLC; East Tennessee Natural Gas, LLC; Enbridge Offshore (Gas Transmission) LLC; Maritimes & Northeast Pipeline, LLC; NEXUS Gas Transmission, LLC; Texas Eastern Transmission, LP

Supplier's details : Enbridge Inc.
5400 Westheimer Court
Houston, Texas 77056

Emergency telephone number (with hours of operation) : 24x7 Emergency Contact Number: 1-800-231-7794

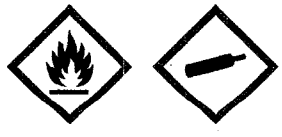
Section 2. Hazards identification

OSHA/HCS status : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Classification of the substance or mixture : FLAMMABLE GASES - Category 1
GASES UNDER PRESSURE - Compressed gas
SIMPLE ASPHYXIANTS

GHS label elements

Hazard pictograms :



Signal word : Danger

Hazard statements : H220 - Extremely flammable gas.
H280 - Contains gas under pressure; may explode if heated.
No code - May displace oxygen and cause rapid suffocation.

Precautionary statements

Section 2. Hazards identification

Prevention : P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Response : P377 - Leaking gas fire: Do not extinguish, unless leak can be stopped safely.
P381 - Eliminate all ignition sources if safe to do so.

Storage : P410 - Protect from sunlight.
P403 - Store in a well-ventilated place.

Disposal : Not applicable.

Supplemental label elements : Keep container tightly closed. Use only with adequate ventilation. Do not enter storage areas and confined spaces unless adequately ventilated.

Hazards not otherwise classified : None known.

Section 3. Composition/information on ingredients

Substance/mixture : Mixture

Other means of identification : Methane, Sweet Gas, Fuel Gas, Pipeline Spec Gas, Sales Gas, Dry Natural Gas, Compressed Gas, CH4

Ingredient name	%	CAS number
Natural gas	80 - 100	8006-14-2
Methane	80 - 100	74-82-8
Ethane	1 - 5	74-84-0
Propane	1 - 5	74-98-6
Butane	1 - 5	106-97-8
Pentane	1 - 5	109-66-0
Nitrogen	1 - 5	7727-37-9
Carbon dioxide, gas	1 - 5	124-38-9

United States: The exact percentage (concentration) in the composition has been withheld as a trade secret in accordance with paragraph (i) of §1910.1200.
Canada: The exact percentage (concentration) in the composition has been withheld as a trade secret in accordance with the amended HPR as of April 2018.

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

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

Section 4. First aid measures

Description of necessary first aid measures

Eye contact : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 20 minutes. Get medical attention if irritation occurs.

Inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

Skin contact : Flush contaminated skin with plenty of water. To avoid the risk of static discharges and gas ignition, soak contaminated clothing thoroughly with water before removing it. Get medical attention if symptoms occur.

Ingestion : As this product is a gas, refer to the inhalation section.

Section 4. First aid measures

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact	: Contact with rapidly expanding gas may cause burns or frostbite.
Inhalation	: At very high concentrations, can displace the normal air and cause suffocation from lack of oxygen.
Skin contact	: Contact with rapidly expanding gas may cause burns or frostbite.
Ingestion	: As this product is a gas, refer to the inhalation section.

Over-exposure signs/symptoms

Eye contact	: No known significant effects or critical hazards.
Inhalation	: No known significant effects or critical hazards.
Skin contact	: No known significant effects or critical hazards.
Ingestion	: No known significant effects or critical hazards.

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

Notes to physician	: In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
Specific treatments	: No specific treatment.
Protection of first-aiders	: No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media	: Use dry chemical, CO_2, water spray (fog) or foam.
Unsuitable extinguishing media	: None known.
Specific hazards arising from the chemical	: Contains gas under pressure. Extremely flammable gas. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion.
Hazardous thermal decomposition products	: Decomposition products may include the following materials: carbon dioxide carbon monoxide
Special protective actions for fire-fighters	: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Contact supplier immediately for specialist advice. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool. If involved in fire, shut off flow immediately if it can be done without risk. If this is impossible, withdraw from area and allow fire to burn. Fight fire from protected location or maximum possible distance. Eliminate all ignition sources if safe to do so.
Special protective equipment for fire-fighters	: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel : Accidental releases pose a serious fire or explosion hazard. No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing gas. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders : Not applicable.

Environmental precautions : Ensure emergency procedures to deal with accidental gas releases are in place to avoid contamination of the environment. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

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

Section 7. Handling and storage

Precautions for safe handling

Protective measures : Put on appropriate personal protective equipment (see Section 8). Contains gas under pressure. Avoid contact with eyes, skin and clothing. Avoid breathing gas. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Empty containers retain product residue and can be hazardous. Do not puncture or incinerate container.

Advice on general occupational hygiene : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. See also Section 8 for additional information on hygiene measures.

Conditions for safe storage, including any incompatibilities : Store in accordance with local regulations. Store in a segregated and approved area. Store away from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10). Eliminate all ignition sources. Keep container tightly closed and sealed until ready for use. See Section 10 for incompatible materials before handling or use.

Section 8. Exposure controls/personal protection

Control parameters

United States

Occupational exposure limits

Ingredient name	Exposure limits
Natural gas	**ACGIH TLV (United States, 3/2018). Oxygen Depletion [Asphyxiant]. Explosive potential.**
Methane	**ACGIH TLV (United States, 3/2018). Oxygen Depletion [Asphyxiant]. Explosive potential.**
Ethane	**ACGIH TLV (United States, 3/2018). Oxygen Depletion [Asphyxiant]. Explosive potential.**
Propane	**NIOSH REL (United States, 10/2016).** TWA: 1000 ppm 10 hours. TWA: 1800 mg/m³ 10 hours. **OSHA PEL (United States, 5/2018).** TWA: 1000 ppm 8 hours. TWA: 1800 mg/m³ 8 hours. **ACGIH TLV (United States, 3/2018). Oxygen Depletion [Asphyxiant]. Explosive potential.**
Butane	**NIOSH REL (United States, 10/2016).** TWA: 800 ppm 10 hours. TWA: 1900 mg/m³ 10 hours. **ACGIH TLV (United States, 3/2018). Explosive potential.** STEL: 1000 ppm 15 minutes.
Pentane	**ACGIH TLV (United States, 3/2018).** TWA: 1000 ppm 8 hours. **NIOSH REL (United States, 10/2016).** TWA: 120 ppm 10 hours. TWA: 350 mg/m³ 10 hours. CEIL: 610 ppm 15 minutes. CEIL: 1800 mg/m³ 15 minutes. **OSHA PEL (United States, 5/2018).** TWA: 1000 ppm 8 hours. TWA: 2950 mg/m³ 8 hours.
Nitrogen	**ACGIH TLV (United States, 3/2018). Oxygen Depletion [Asphyxiant].**
Carbon dioxide, gas	**ACGIH TLV (United States, 3/2018).** TWA: 5000 ppm 8 hours. TWA: 9000 mg/m³ 8 hours. STEL: 30000 ppm 15 minutes. STEL: 54000 mg/m³ 15 minutes. **NIOSH REL (United States, 10/2016).** TWA: 5000 ppm 10 hours. TWA: 9000 mg/m³ 10 hours. STEL: 30000 ppm 15 minutes. STEL: 54000 mg/m³ 15 minutes. **OSHA PEL (United States, 5/2018).** TWA: 5000 ppm 8 hours. TWA: 9000 mg/m³ 8 hours.

Canada

Occupational exposure limits

Ingredient name	Exposure limits
Natural gas	**CA Alberta Provincial (Canada, 6/2018).** 8 hrs OEL: 1000 ppm 8 hours. **CA Ontario Provincial (Canada, 1/2018).** TWA: 1000 ppm 8 hours. **CA Saskatchewan Provincial (Canada, 7/2013).** STEL: 1250 ppm 15 minutes. TWA: 1000 ppm 8 hours. **CA British Columbia Provincial (Canada, 7/2018). Oxygen Depletion [Asphyxiant]. Explosive potential.**
Methane	**CA Alberta Provincial (Canada, 6/2018).** 8 hrs OEL: 1000 ppm 8 hours. **CA Ontario Provincial (Canada, 1/2018).** TWA: 1000 ppm 8 hours. **CA Saskatchewan Provincial (Canada, 7/2013).**

Section 8. Exposure controls/personal protection

	STEL: 1250 ppm 15 minutes. TWA: 1000 ppm 8 hours. **CA Quebec Provincial (Canada, 1/2014). Oxygen Depletion [Asphyxiant].**
Ethane	**CA British Columbia Provincial (Canada, 7/2018). Oxygen Depletion [Asphyxiant]. Explosive potential.** **CA Alberta Provincial (Canada, 6/2018).** 8 hrs OEL: 1000 ppm 8 hours. **CA Ontario Provincial (Canada, 1/2018).** TWA: 1000 ppm 8 hours. **CA Saskatchewan Provincial (Canada, 7/2013).** STEL: 1250 ppm 15 minutes. TWA: 1000 ppm 8 hours. **CA Quebec Provincial (Canada, 1/2014). Oxygen Depletion [Asphyxiant].**
Propane	**CA British Columbia Provincial (Canada, 7/2018). Oxygen Depletion [Asphyxiant]. Explosive potential.** **CA Alberta Provincial (Canada, 6/2018).** 8 hrs OEL: 1000 ppm 8 hours. **CA Quebec Provincial (Canada, 1/2014).** TWAEV: 1000 ppm 8 hours. TWAEV: 1800 mg/m³ 8 hours. **CA Ontario Provincial (Canada, 1/2018).** TWA: 1000 ppm 8 hours. **CA Saskatchewan Provincial (Canada, 7/2013).** STEL: 1250 ppm 15 minutes. TWA: 1000 ppm 8 hours. **CA British Columbia Provincial (Canada, 7/2018). Oxygen Depletion [Asphyxiant]. Explosive potential.**
Butane	**CA Alberta Provincial (Canada, 6/2018).** 8 hrs OEL: 1000 ppm 8 hours. **CA Quebec Provincial (Canada, 1/2014).** TWAEV: 800 ppm 8 hours. TWAEV: 1900 mg/m³ 8 hours. **CA Ontario Provincial (Canada, 1/2018).** TWA: 800 ppm 8 hours. **CA Saskatchewan Provincial (Canada, 7/2013).** STEL: 1250 ppm 15 minutes. TWA: 1000 ppm 8 hours. **CA British Columbia Provincial (Canada, 7/2018). Explosive potential.**
Pentane	STEL: 1000 ppm 15 minutes. **CA Alberta Provincial (Canada, 6/2018).** 8 hrs OEL: 600 ppm 8 hours. 8 hrs OEL: 1770 mg/m³ 8 hours. **CA British Columbia Provincial (Canada, 7/2018).** TWA: 1000 ppm 8 hours. **CA Ontario Provincial (Canada, 1/2018).** TWA: 1000 ppm 8 hours. **CA Quebec Provincial (Canada, 1/2014).** TWAEV: 120 ppm 8 hours. TWAEV: 350 mg/m³ 8 hours. **CA Saskatchewan Provincial (Canada, 7/2013).** STEL: 750 ppm 15 minutes. TWA: 600 ppm 8 hours.
Nitrogen	**CA Alberta Provincial (Canada, 6/2018). Oxygen Depletion [Asphyxiant].** **CA British Columbia Provincial (Canada, 7/2018). Oxygen Depletion [Asphyxiant].** **CA Ontario Provincial (Canada, 1/2018). Oxygen Depletion [Asphyxiant].** **CA Quebec Provincial (Canada, 1/2014). Oxygen Depletion [Asphyxiant].**
Carbon dioxide, gas	**CA Alberta Provincial (Canada, 6/2018).** 15 min OEL: 54000 mg/m³ 15 minutes.

Section 8. Exposure controls/personal protection

	8 hrs OEL: 5000 ppm 8 hours. 15 min OEL: 30000 ppm 15 minutes. 8 hrs OEL: 9000 mg/m³ 8 hours. **CA British Columbia Provincial (Canada, 7/2018).** TWA: 5000 ppm 8 hours. STEL: 15000 ppm 15 minutes. **CA Ontario Provincial (Canada, 1/2018).** TWA: 5000 ppm 8 hours. STEL: 30000 ppm 15 minutes. **CA Quebec Provincial (Canada, 1/2014).** TWAEV: 5000 ppm 8 hours. TWAEV: 9000 mg/m³ 8 hours. STEV: 30000 ppm 15 minutes. STEV: 54000 mg/m³ 15 minutes. **CA Saskatchewan Provincial (Canada, 7/2013).** STEL: 30000 ppm 15 minutes. TWA: 5000 ppm 8 hours.

Appropriate engineering controls : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Environmental exposure controls : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.

Individual protection measures

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.

Skin protection

Hand protection : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

Body protection : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.

Other skin protection : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Section 8. Exposure controls/personal protection

Respiratory protection : The gas can cause asphyxiation without warning by replacing the oxygen in the air. Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. If operating conditions cause high gas concentrations to be produced or any recommended or statutory exposure limit is exceeded, use an air-fed respirator or self-contained breathing apparatus. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Section 9. Physical and chemical properties

Appearance

Physical state : Gas.

Color : Natural gas in its pure state is colorless.

Odor : Natural gas in its pure state is odorless. An odorant, consisting of Mercaptan is added before natural gas enters a gas distribution system. The odor is quite offensive like rotten eggs.

Odor threshold : <10000 ppm

pH : Not available.

Melting point : -182.6°C (-296.7°F)

Boiling point/boiling range : -161.5°C (-258.7°F)

Flash point : -188°C (methane)

Evaporation rate : >1 (Butyl acetate = 1)

Flammability (solid, gas) : Flammable in the presence of the following materials or conditions: open flames, sparks and static discharge.

Lower and upper explosive (flammable) limits : Lower: 5%
Upper: 15%

Vapor pressure : >133.3 kPa (>1000 mm Hg) [room temperature]

Vapor density : 0.56 to 0.59 [Air = 1]

Relative density : Not available.

Solubility : Not available.

Partition coefficient: n-octanol/water : Not available.

Auto-ignition temperature : 537°C (998.6°F)

Decomposition temperature : Not available.

Viscosity : Not available.

Flow time (ISO 2431) : Not available.

Section 10. Stability and reactivity

Reactivity : No specific test data related to reactivity available for this product or its ingredients.

Chemical stability : The product is stable.

Possibility of hazardous reactions : Under normal conditions of storage and use, hazardous reactions will not occur.

Section 10. Stability and reactivity

Conditions to avoid : Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Do not allow gas to accumulate in low or confined areas.

Incompatible materials : Reactive or incompatible with the following materials: oxidizing materials.

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

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Butane	LC50 Inhalation Vapor	Rat	658000 mg/m³	4 hours
Pentane	LC50 Inhalation Vapor	Rat	364 g/m³	4 hours

Irritation/Corrosion

There is no data available.

Sensitization

There is no data available.

Mutagenicity

There is no data available.

Carcinogenicity

There is no data available.

Reproductive toxicity

There is no data available.

Teratogenicity

There is no data available.

Specific target organ toxicity (single exposure)

Name	Category	Target organs
Pentane	Category 3	Narcotic effects

Specific target organ toxicity (repeated exposure)

There is no data available.

Aspiration hazard

Name	Result
Pentane	ASPIRATION HAZARD - Category 1

Information on the likely routes of exposure : Dermal contact. Eye contact. Inhalation.

Potential acute health effects

Eye contact : Contact with rapidly expanding gas may cause burns or frostbite.

Inhalation : At very high concentrations, can displace the normal air and cause suffocation from lack of oxygen.

Skin contact : Contact with rapidly expanding gas may cause burns or frostbite.

Ingestion : As this product is a gas, refer to the inhalation section.

Section 11. Toxicological information

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact	: No known significant effects or critical hazards.
Inhalation	: No known significant effects or critical hazards.
Skin contact	: No known significant effects or critical hazards.
Ingestion	: No known significant effects or critical hazards.

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects	: No known significant effects or critical hazards.
Potential delayed effects	: No known significant effects or critical hazards.

Long term exposure

Potential immediate effects	: No known significant effects or critical hazards.
Potential delayed effects	: No known significant effects or critical hazards.

Potential chronic health effects

General	: No known significant effects or critical hazards.
Carcinogenicity	: No known significant effects or critical hazards.
Mutagenicity	: No known significant effects or critical hazards.
Teratogenicity	: No known significant effects or critical hazards.
Developmental effects	: No known significant effects or critical hazards.
Fertility effects	: No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

There is no data available.

Section 12. Ecological information

Toxicity

There is no data available.

Persistence and degradability

There is no data available.

Bioaccumulative potential

Product/ingredient name	$LogP_{ow}$	BCF	Potential
Methane	1.09	-	low
Ethane	1.09	-	low
Propane	1.09	-	low
Butane	2.89	-	low
Pentane	3.45	171	low
Nitrogen	0.67	-	low
Carbon dioxide, gas	0.83	-	low

Mobility in soil

Section 12. Ecological information

Soil/water partition coefficient (K_{OC}) : Not available.

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

Section 13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Empty pressure vessels should be returned to the supplier. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Do not puncture or incinerate container.

Section 14. Transport information

	DOT Classification	TDG Classification	IMDG	IATA
UN number	UN1971	UN1971	UN1971	UN1971
UN proper shipping name	METHANE, COMPRESSED OR NATURAL GAS, COMPRESSED (Methane, Natural gas)	METHANE, COMPRESSED OR NATURAL GAS, COMPRESSED (Methane, Natural gas)	METHANE, COMPRESSED OR NATURAL GAS, COMPRESSED (Methane, Natural gas)	METHANE, COMPRESSED OR NATURAL GAS, COMPRESSED (Methane, Natural gas)
Transport hazard class(es)	2.1 	2.1 	2.1 	2.1 
Packing group	-	-	-	-
Environmental hazards	No.	No.	No.	No.

AERG : 115

Additional information

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

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

Section 15. Regulatory information

U.S. Federal regulations : **United States inventory (TSCA 8b)**: All components are listed or exempted.
Clean Air Act (CAA) 112 regulated flammable substances: Methane; Pentane; Butane; Propane; Ethane

Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs) : Not listed

Section 15. Regulatory information

Clean Air Act Section 602 Class I Substances : Not listed

Clean Air Act Section 602 Class II Substances : Not listed

DEA List I Chemicals (Precursor Chemicals) : Not listed

DEA List II Chemicals (Essential Chemicals) : Not listed

SARA 302/304

No products were found.

SARA 304 RQ : Not applicable.

SARA 311/312

Classification : FLAMMABLE GASES - Category 1
GASES UNDER PRESSURE - Compressed gas
SIMPLE ASPHYXIANTS

Composition/information on ingredients

Name	Classification
Pentane	FLAMMABLE LIQUIDS - Category 2 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3 ASPIRATION HAZARD - Category 1

SARA 313

There is no data available.

State regulations

Massachusetts : The following components are listed: Natural gas; Methane; Pentane; Butane; Propane; Ethane; Nitrogen; Carbon dioxide, gas

New York : None of the components are listed.

New Jersey : The following components are listed: Methane; Pentane; Butane; Propane; Ethane; Nitrogen; Carbon dioxide, gas

Pennsylvania : The following components are listed: Natural gas; Methane; Pentane; Butane; Propane; Ethane; Nitrogen; Carbon dioxide, gas

California Prop. 65

This product does not require a Safe Harbor warning under California Prop. 65.

Canadian lists

Canada inventory (DSL NDSL) : All components are listed or exempted.

Canadian NPRI : The following components are listed: Methane; Pentane; Butane; Propane; Ethane

CEPA Toxic substances : The following components are listed: Methane; Ethane; Carbon dioxide, gas

Section 16. Other information

Procedure used to derive the classification

Classification	Justification
FLAMMABLE GASES - Category 1	On basis of test data
GASES UNDER PRESSURE - Compressed gas	On basis of test data
SIMPLE ASPHYXIANTS	Expert judgment

History

Date of issue mm/dd/yyyy : 12/15/2019

Section 16. Other information

Date of previous issue	:	Not applicable
Version	:	1
Internal code	:	425-001
Prepared by	:	KMK Regulatory Services Inc.
Key to abbreviations	:	ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor GHS = Globally Harmonized System of Classification and Labelling of Chemicals IATA = International Air Transport Association IBC = Intermediate Bulk Container IMDG = International Maritime Dangerous Goods LogPow = logarithm of the octanol/water partition coefficient MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution) UN = United Nations

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.
Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.