

Material Name: Natural Gas, Refrigerated Liquid ((Cryogenic Liquid) with High Methane Content)

Location: United States

Section 1 – Product and Company Identification

GHS Product Identifier Chemical Name Other Names	Natural Gas, Refrigerated Liquid (Cryogenic Liquid) Natural Gas, Refrigerated Liquid Liquefied Natural Gas, LNG, Liquid Methane, Marsh gas, Methyl hydride, Fire damp, UN1971, UN1972, R50, Biogas
Product Use	Industrial engine fueling, heat homes, generate electricity, supply other industrial processes, illuminated/cooking gas.
Synonyms	Liquefied Natural Gas, LNG
Manufacturer Info	Eagle LNG 16236 Normandy Blvd Jacksonville, FL 32234
Supplier Info	Eagle LNG Research Forest Lakeside No. 4 2445 Technology Forest Blvd., Suite 500 The Woodlands, TX 77381
24-Hr Phone	Eagle LNG 1-800-633-8253

Section 2 – Hazards Identification

GHS Classification	 H220 – Flammable Gases - Category 1 H280 – Compressed Gas - May Explode if Heated H281 – Gases Under Pressure - Refrigerated Liquefied Gas H361 – Suspected of Damaging Fertility or the Unborn Child - Category 2 H373 – May Cause Damage to Organs H380 – Simple Asphyxiant
Hazard Pictograms	



Material Name: Natural Gas, Refrigerated Liquid ((Cryogenic Liquid) with High Methane Content)

Location: United States

Signal Word	Danger
Hazard Statements	 H220 – Extremely flammable gas. H280 – Contains gas under pressure; may explode if heated. H361 – May damage the unborn child (inhalation). H373 – May cause damage to organs (central nervous system) through prolonged or repeated exposure. H380 – May displace oxygen and cause rapid suffocation. H401 – Toxic to aquatic life.
Precautionary Statements	 P201 – Obtain special instructions before use. P202 – Do not handle until all safety precautions have been read and understood. P210 – Keep away from heat, sparks, open flames, hot surfaces. – No smoking. P260 – Do not breathe vapors/gas. P273 – Avoid release to the environment. P280 – Wear gloves, protective clothing, eye protection, face protection. P308+P313 – if exposed or concerned: Get medical advice/attention. P314 – Get medical advice and attention if you feel unwell. P377 – Leaking gas fire: Do not extinguish, unless leak can be stopped safely. P381 – Eliminate all ignition sources if safe to do so. P405 – Store locked up. P410+P403 – Protect from sunlight. Store in a well-ventilated place. P501 – Dispose of contents/container according to local, regional, national, and international regulations.
Other Hazards not Contributing to the Classification	Odorless, colorless liquid. This product is NOT odorized. Asphyxiant in high concentrations. Contact with liquid may cause cold burns/frostbite.



Material Name: Natural Gas, Refrigerated Liquid ((Cryogenic Liquid) with High Methane Content)

Location: United States

Section 3 – Composition / Information on Ingredients

Substance/Mixture	Substance
Chemical Name	Methane
Other Names	Liquid natural gas, Liquid methane, Marsh gas, Methyl hydride, Fire
	damp, UN1971, UN1972, R50, Biogas
Formula	CH ₄

Chemical Name	CAS#	Concentrations
Methane	74-82-8	>90%
Ethane	74-84-0	<4%
Propane+	74-98-6	<2%
Hexane+	110-54-3	<0.05% (500 ppm)
Oxygen	7782-44-7	<20ppm
Nitrogen	7727-37-9	<4%
Carbon dioxide	124-38-9	<50 ppm
Water	7732-18-5	<0.5ppm

Section 4 – First Aid Measures

Necessary First Aid Measures:

General	Remove the victim from the source of contamination. Medical attention should be prompt in all cases of over-exposure to Natural Gas. Rescue personnel should be equipped with Self-Contained Breathing Apparatus. Also note that there is no specific antidote and treatment of over-exposure should be directed at the control of symptoms and the clinical condition. Take a copy of the label and SDS to physician or other health professional with victim(s).
Eyes	Remove victim from the source of contamination. Never introduce oil or ointment into the eyes without medical advice. Irrigate exposed eyes with copious amounts of room temperature water for at least 15 minutes. If the victim cannot tolerate light, protect eyes with dark glasses. The use of bandages is not recommended for keeping the eyelids closed as exerting pressure on the eyelid may cause further damage. If irritation, pain, swelling, or other symptoms persist, the patient should be seen by a health care physician.



Material Name: Natural Gas, Refrigerated Liquid ((Cryogenic Liquid) with High Methane Content)

Location: United States

Skin	Clothing frozen to the skin should be thawed prior to removal. Remove contaminated clothing and flush affected area with lukewarm water. DO NOT USE HOT WATER. Keep victim warm and quiet. A physician should see the patient promptly if frostbite has occurred.
Ingestion	A physician should see the patient promptly if frostbite has occurred.
Inhalation	RESCUE PERSONNEL SHOULD BE EQUIPPED WITH SELF-CONTAINED BREATHING APPARATUS. Quick removal from the contaminated area is most important. Conscious persons should be assisted to an uncontaminated area and inhale fresh air. Unconscious persons should be moved to an uncontaminated area, given assisted resuscitation and supplemental oxygen. PROMPT MEDICAL ATTENTION IS MANDATORY IN ALL CASES OF OVEREXPOSURE TO NATURAL GAS. Further treatment should be symptomatic and supportive.

Important Symptoms/Effects (Acute and Delayed):

Acute	
Eyes	Extremely cold material. Liquid can cause burns similar to frostbite.
Skin	Extremely cold material. Dermal contact with rapidly evaporating liquid could result in freezing of the tissues or frostbite.
Frostbite	Try to warm up the frozen tissues and seek medical attention.
Ingestion	Ingestion of liquid can cause burns similar to frostbite.
Inhalation	No known significant effects or critical hazards.

Over-exposure Signs/Symptoms

Eyes	Adverse symptoms may include the following: frostbite, decreased night vision, tunnel vision, dizziness.
Skin	Adverse symptoms may include the following: frostbite.
Ingestion	Adverse symptoms may include the following: frostbite, nausea, vomiting, gastrointestinal hemorrhage.



Methane Content) Location: United States		
Inhalation	Adverse symptoms may include the following: hyperventilation, cyanosis, bronchoconstriction, respiratory depression, pulmonary edema, lung congestion.	
Indication of Immediate I	Medical Attention and Special Treatment:	
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.	
**	**Section 5 – Fire Fighting Measures***	
Extinguishing Media	Water, foam, carbon dioxide, dry chemical. Use water (as fog) in flooding quantities. Dry chemical is preferred as firefighting agent. If safe to do so, allow flame to burn out. If flames are accidentally extinguished, explosive re-ignition may occur. Use extinguishing media appropriate for surrounding fire.	
Unsuitable Extinguishing Media	None.	
Specific Hazards From Chemical	Contains gas under pressure. Contains refrigerated liquid. In a fire or if heated, a pressure increase will occur and the container may burst or explode.	
Hazardous Thermal Decomposition	None.	
Special Protective Actions for Fire- Fighters	If tank, rail car or tank truck is involved in a fire, ISOLATE for 1600 meters (1 mile) in all directions established under ERG 115. If fire becomes uncontrollable or container is exposed to direct flame, consider EVACUATION of 530 meters (1/3 mile) in all directions established under ERG 115. The flammable mixture of gas and air may extend far beyond the distances that are regarded as adequate for normal safety purposes, with the result that the flammable mixture may become ignited by a household fire or automobile engine well outside the specified danger zone. Vapor may thus be	

Material Name¹ Natural Gas, Refrigerated Liquid ((Cryogenic Liquid) with High



Material Name: Natural Gas, Refrigerated Liquid ((Cryogenic Liquid) with High Methane Content)

Location: United States

	set alight over a very large area and flame propagation through the mixture may reach explosive violence.
Special Protective Equipment for Fire- Fighters	Self-contained breathing apparatus with a full face-piece operated in pressure-demand or other positive pressure mode, full bunker gear, and other proper protective equipment.
	Approach area from up-wind. Do not extinguish fire unless flow can be stopped. Cool all affected containers with flooding quantities of water to prevent impingement and potential BLEVE of the container. Apply water from as far a distance as possible. Under prolonged exposure to fire or intense heat, the containers may rupture violently and rocket. Flashback along vapor trail may occur. Due to the high heat radiation from a natural gas fire, it is important to ensure other combustibles in the vicinity do not catch fire.
	Avoid application of water to pooled product as water may create rapid phase transition of the material, creating small concussion-like explosions and increase the vaporization rate which may migrate downwind faster than expected.

Section 6 – Accidental Release Measures

Precautions, Protective Equipment, and Emergency Procedures

Non-emergency Personnel	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas for at least 100 m (330 ft). Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing gas. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
Emergency Responders	Use appropriate protective clothing and wear a Self-Contained Breathing Apparatus when entering the area. Eliminate all ignition sources. Shut off the flow of product if safe to do so. Clear the affected area and allow the liquid to evaporate and gas to dissipate. Test for sufficient oxygen and ensure oxygen level is at least 19.5% prior to re-entry.



Material Name: Natural Gas, Refrigerated Liquid ((Cryogenic Liquid) with High Methane Content)

Location: United States

Environmental	Ensure emergency procedures to deal with accidental releases are in
Precautions	place to avoid contamination of the environment. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains
	and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Materials and Methods for Containment and Clean-up

Small Spill	Immediately contact emergency personnel. Stop leak if without risk.
Large Spill	Consider initial downwind evacuation for at least 800 meters (1/2 mile) in all directions. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section	7 –	Handling	and	Storage
------------	-----	----------	-----	------------

Safe Handling

Protective Measures	Put on appropriate personal protective equipment (see Section 8). Contains gas under pressure. Contains refrigerated liquid. Do not get in eyes or on skin or clothing. Avoid breathing vapor. Empty containers retain product residue and can be hazardous. Do not puncture or incinerate container. Use equipment rated for cylinder pressure. Close valve after each use and when empty. Use a suitable hand truck for cylinder movement. Never allow any unprotected part of the body to touch uninsulated pipes or vessels that contain cryogenic liquids. Prevent entrapment of liquid in closed systems or piping without pressure relief devices. Some materials may become brittle at low temperatures and will easily fracture.
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. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
<u>Storage Conditions</u> Conditions for Safe Storage (plus incompatibilities)	Proper grounding procedures to avoid static electricity should be followed. Store and use with adequate ventilation and isolate from oxidizing agents. Outside or detached storage is preferred only if



Material Name: Natural Gas, Refrigerated Liquid ((Cryogenic Liquid) with High Methane Content)

Location: United States

adequately protected from the weather and direct sunlight. Avoid high temperatures. Storage areas should be located at a safe distance from occupied premises and neighboring dwellings. Protect against physical damage. Prohibit open flame, and inspect for leakage. Containers are equipped with a safety relief valve.



Material Name: Natural Gas, Refrigerated Liquid ((Cryogenic Liquid) with High Methane Content)

Location: United States

Section 8 – Exposure Controls / Personal Protection

Chemical	Advisory Agency	Exposure Limits
Name	, , ,	•
METHANE	USA ACGIH ACGIH TWA (ppm)	Formerly 1000 ppm Based on Aliphatic hydrocarbon gases, Alkanes [C1-C4] ; Refer to Appendix F : Minimal Oxygen Content of the 2014 TLV Book
	USA ACGIH Remark (ACGIH)	Simple Asphyxiant; Explosive
ETHANE	Alberta OEL TWA (ppm)	1000 ppm
	British Columbia OEL TWA (ppm)	1000 ppm
	Northwest Territories OEL STEL (ppm)	1250 ppm
	Northwest Territories OEL TWA (ppm)	1000 ppm
	Saskatchewan OEL STEL (ppm)	1250 ppm
	Saskatchewan OEL TWA (ppm)	1000 ppm
PROPANE	USA OSHA OSHA PEL (TWA) (mg/m ³)	1800 mg/m³
	USA OSHA OSHA PEL (TWA) (ppm)	1000 ppm
	USA NIOSH NIOSH REL (TWA) (mg/m ³)	1800 mg/m³
	USA NIOSH NIOSH REL (TWA) (ppm)	1000 ppm
	USA IDLH US IDLH (ppm)	2100 ppm (10% LEL)
	Alberta OEL TWA (ppm)	1000 ppm
	British Columbia OEL TWA (ppm)	1000 ppm
	Northwest Territories OEL TWA (ppm)	1000 ppm
	Québec VEMP (mg/m³)	1800 mg/m³
	Québec VEMP (ppm)	1000 ppm
	Saskatchewan OEL STEL (ppm)	1250 ppm
	Saskatchewan OEL TWA (ppm)	1000 ppm
HEXANE	USA ACGIH ACGIH TWA (ppm)	50 ppm
	USA ACGIH ACGIH chemical category	Skin - potential significant contribution to overall
		exposure by the cutaneous route
	USA ACGIH Biological Exposure Indices (BEI)	0.4 mg/l (Medium: urine - Time: end of shift at end
		of workweek - Parameter: 2,5-Hexanedione
		without
		hydrolysis)
	USA OSHA OSHA PEL (TWA) (mg/m ³)	1800 mg/m ³
	USA OSHA OSHA PEL (TWA) (ppm)	500 ppm
	USA NIOSH NIOSH REL (TWA) (mg/m ³)	180 mg/m ³
	USA NIOSH NIOSH REL (TWA) (ppm)	50 ppm
	USA IDLH US IDLH (ppm)	1100 ppm (10% LEL)
		1/6 mg/m ²
	Alberta OEL IWA (ppm)	50 ppm
1	New Brunswick OEL IWA (mg/m²)	1/6 mg/m²

Occupational Exposure Limits



Material Name: Natural Gas, Refrigerated Liquid ((Cryogenic Liquid) with High Methane Content)

Location: United States

		50
	New Brunswick OEL TWA (ppm)	50 ppm
	Newfoundland & Labrador OEL TWA (ppm)	50 ppm
	Nova Scotia OEL TWA (ppm)	50 ppm
	Nunavut OEL STEL (mg/m ³)	440 mg/m ³
	Nunavut OEL STEL (ppm)	125 ppm
	Nunavut OEL TWA (mg/m ³)	352 mg/m ³
	Nunavut OEL TWA (ppm)	100 ppm
	Northwest Territories OEL STEL (ppm)	62.5 ppm
	Northwest Territories OEL TWA (ppm)	50 ppm
	Ontario OEL TWA (ppm)	50 ppm
	Prince Edward Island OEL TWA (ppm)	50 ppm
	Québec VEMP (mg/m ³)	176 mg/m³
	Québec VEMP (ppm)	50 ppm
	Saskatchewan OEL STEL (ppm)	62.5 ppm
	Saskatchewan OEL TWA (ppm)	50 ppm
	Yukon OEL STEL (mg/m ³)	450 mg/m ³
	Yukon OEL STEL (ppm)	125 ppm
	Yukon OEL TWA (mg/m³)	360 mg/m ³
	Yukon OEL TWA (ppm)	100 ppm
NITROGEN	USA ACGIH Remark (ACGIH)	Simple asphyxiant
CARBON	USA ACGIH TWA (mg/m³)	9000 mg/m ³
DIOXIDE		
	USA ACGIH TWA (ppm)	5000 ppm
	USA ACGIH STEL (mg/m ³)	54000 mg/m ³
	USA ACGIH STEL (ppm)	30000 ppm
	USA ACGIH Remark (ACGIH)	Asphyxia
	USA OSHA PEL (TWA) (mg/m³)	9000 mg/m ³
	USA OSHA PEL (TWA) (ppm)	5000 ppm

Engineering Controls	Explosion proof ventilation systems may be acceptable if it can maintain an adequate supply of air to maintain LEL levels. Grounding and bonding of equipment is required during the transfer of product to eliminate potential of static discharge. Oxygen detectors.
Environmental Exposure Controls	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.



Material Name: Natural Gas, Refrigerated Liquid ((Cryogenic Liquid) with High Methane Content)

Location: United States

Protection Measures	
Hygiene	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	The following protection is required: safety glasses or splash googles and full face shields.
Respiratory Protection	Use a properly fitted, air supplied respirators where local or general exhaust ventilation is inadequate. OSHA approved supplied air/self- contained air respirators must be used in confined spaces, oxygen deficient atmospheres, and rescue situations.
Skin Protection	
Hand Protection	Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times. Insulated gloves suitable for low temperatures are to be worn.
Body Protection	Use fire/flame resistant/retardant clothing while handling material, and in accordance with the hazards of the task and site.
Other	Safety footwear is to be used in accordance with the hazards of the task and site.

Section 9 – Physical & Chemical Properties

Physical State Color	Liquid / vapor Colorless
Molecular Weight	16.04 g/mol
Molecular Formula	CH4
Boiling/Condensation Point	-160 °C (-256 °F)
Melting/Freezing Point	-183 °C (-297 °F)
Odor	Odorless.
рН	Not applicable.
Flash Point	-187 °C (-306 °F)
Evaporation Rate	Not applicable.



Material Name: Natural Gas, Refrigerated Liquid ((Cryogenic Liquid) with High Methane Content)

Location: United States

Lower Explosive (Flammable Limits)	5% by volume.
Upper Explosive (Flammable Limits)	15% by volume.
Vapor Pressure	4.66 x 10 ⁵ mm Hg @ 77°F (25°C)
Specific Volume (ft³/lb)	13.8889
Specific Gravity/Density	808.5 kg/m ³
Gas Density (lb/ft ³)	0.072
Relative Density	0.55 (0.55-0.64)
Solubilities	0.60 ml in 1 g ethyl alcohol @ 20°C; soluble
	in benzene, methanol, toluene; slightly
	soluble in acetone; 0.91 ml in 1 g ether @
	20°C; in water 22 mg/liter @ 25°C.
Partition Coefficient: n-Octanol/Water	Not applicable.
Auto-Ignition Temperature	537 °C (999 °F)
Decomposition	When ignited in the presence of oxygen, will
	burn to produce carbon monoxide, carbon
	dioxide.
Viscosity	34.8 uP @ -181.6°C; 76.0 uP @ -78.5°C;
	102.6 uP @ 0°C; 108.7 uP @ 20°C; 133.1 uP
	@ 100°C; 160.5 uP @ 200.5°C; 181.3 uP @
	284°C; 202.6 uP @ 380°C; 226.4 uP @ 499°C
Explosion Sensitivity to Mechanical Impact	Not sensitive.
Explosion Sensitivity to Static Discharge	Static discharge may cause methane vapor /
	gas to ignite explosively.

Section 10 – Chemical Stability & Reactivity Information

Reactivity	Sensitive to static discharge.
Chemical Stability	The product is stable.
Hazardous Reactions	Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to Avoid	Avoid heat, open flames, sparks, and flammable atmospheres.
Incompatible Materials	Strong oxidizing agents.



Material Name: Natural Gas, Refrigerated Liquid ((Cryogenic Liquid) with High Methane Content)

Location: United States

Hazardous Decomposition Products	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
Hazardous Polymerization	Under normal conditions of storage and use, hazardous polymerization will not occur.



Material Name: Natural Gas, Refrigerated Liquid ((Cryogenic Liquid) with High Methane Content)

Location: United States

*******Section 11 – Toxicological Information***

Toxicological Effects

Acute Toxicity	Not available.
Irritation/Corrosion	Not available.
Sensitization	Not available.
Mutagenicity	Not available.
Carcinogenicity	Not available.
Reproductive Toxicity	May damage the unborn child.
Teratogenicity	Not available.
Specific Target Organ Toxicity (Single Exposure)	Not available.
Specific Target Organ Toxicity (Repeated	Not available.
Exposure)	
Aspiration Hazard	Not available.
Information on Likely Routes of Exposure	Not available.

Potential Acute Health Effects

Eye Contact	Extremely cold material. Liquid can cause burns similar to frostbite.
Inhalation	Vapors may cause dizziness or asphyxiation without warning.
Skin Contact	Extremely cold material. Dermal contact with rapidly evaporating
	liquid could result in freezing of the tissues or frostbite.
Ingestion	Ingestion of liquid can cause burns similar to frostbite.

Symptoms Related to Physical, Chemical, and Toxicological Characteristics

Eye Contact	Adverse symptoms may include the following: frostbite.
Inhalation	Vapors may cause dizziness or asphyxiation without warning.
Skin Contact	Adverse symptoms may include the following: frostbite.
Ingestion	Adverse symptoms may include the following: frostbite.

Delayed and Immediate Effects/Chronic Effects from Short and Long-term Exposure

Short-term Immediate Effects	Not available.
Short-term Delayed Effects	Not available.
Long-term Immediate Effects	Not available.
Long-term Delayed Effects	Not available.
Potential Chronic Health Effects	Not available.

General	No known significant effects or critical hazards.
Carcinogenicity	No known significant effects or critical hazards.
Mutagenicity	No known significant effects or critical hazards.



Material Name: Natural Gas, Refrigerated Liquid ((Cryogenic Liquid) with High Methane Content)

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

Not available.

Section 12 – Ecological Information

Toxicity	Not available.
Persistence and Degradability	Biodegradation may occur in soil and water. Volatilization is
	expected to exist entirely in the vapor phase in ambient air.
Mobility in Soil	If released to soil, ethane is expected to have very high
	mobility based upon an estimated K _{oc} of 37.
Other Adverse Effects	Can cause frost damage to vegetation.

Chemical Name	LogPow	BCF	Potential
LIQUEFIED NATURAL GAS	-	Not established	-
ETHANE	<= 2.3	-	-
CARBON DIOXIDE	0.83	None.	-
NITROGEN	0.67	-	Low

Section 13 – Disposal Considerations

Disposal MethodsThe generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. 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.



Material Name: Natural Gas, Refrigerated Liquid ((Cryogenic Liquid) with High Methane Content)

Location: United States

	DOT	TDG	Mexico	IMDG	ΙΑΤΑ
UN Number	UN1972	UN1972	UN1972	UN1972	UN1972
UN Proper Shipping Name	NATURAL GAS, REFRIGERATED LIQUID (CRYOGENIC LIQUID, WITH HIGH METHANE CONTENT)				
Transport Hazard Class(es)	2.1	2.1	2.1	2.1	2.1
Packing Group					
Environment	No.	No.	No.	No.	No.
Additional Information	ERG (2012) NUMBER: 115	ERG (2012) NUMBER: 115			

Section 14 – Transportation Information

Special Precautions	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.
Transport in Bulk According to Annex II of MARPOL 73/78 and the IBC Code	E – the material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel carrying a number of passengers limited to not more than the larger of 25 passengers, or one passenger per each 3m of overall vessel length, but is prohibited from carriage on passenger vessels in which the limiting number of passengers is exceeded. 40 – Stow "clear of living quarters" Passenger aircraft / rail: Forbidden.



Material Name: Natural Gas, Refrigerated Liquid ((Cryogenic Liquid) with High Methane Content)

Location: United States

Section 15 – Regulatory Information

United States - State Regulations

Connecticut	Hazardous Air Pollutants - HLVs (30 min)		
	Hazardous Air Pollutants - HLVs (8 hr)		
Delaware	Accidental Release Prevention Regulations - Sufficient Quantities		
	Accidental Release Prevention Regulations - Threshold Quantities		
	Pollutant Discharge Requirements - Reportable Quantities		
	Volatile Organic Compounds Exempt from Requirements		
Maine	Air Pollutants - Greenhouse Gases (GHG)		
Massachusetts	Oil & Hazardous Material List - Groundwater Reportable Concentration -		
	Reporting Category 1		
	Oil & Hazardous Material List - Reportable Quantity		
	Oil & Hazardous Material List - Soil Reportable Concentration - Reporting		
	Category 1		
	Oil & Hazardous Material List - Soil Reportable Concentration - Reporting		
	Category 2		
	Right To Know List		
	Volatile Organic Compounds Exempt From Requirements		
Minnesota	Hazardous Substance List		
New Jersey	Right to Know Hazardous Substance List		
	Discharge Prevention - List of Hazardous Substances		
	Environmental Hazardous Substances List		
	Excluded Volatile Organic Compounds		
	Special Health Hazards Substances List		
	TCPA - Extraordinarily Hazardous Substances (EHS)		
New York	Reporting of Releases Part 597 - List of Hazardous Substances		
Ohio	Accidental Release Prevention - Threshold Quantities		
Oregon	Permissible Exposure Limits – TWAs		
Pennsylvania	RTK (Right to Know) List		
Texas	Effects Screening Levels - Long Term		
	Effects Screening Levels - Short Term		
Washington	Permissible Exposure Limits - Simple Asphyxiants		
<u>Canada</u>			
WHMIS	Class A: Compressed gas.		
	Class B: Flammable/Combustible Material		
	Division 2.1 – Flammable Gas		
Domestic Substa	ances List Listed.		



Material Name: Natural Gas, Refrigerated Liquid ((Cryogenic Liquid) with High Methane Content)

Location: United States

CEPA Toxic substances	Not listed.
Canadian ARET	Not listed.
Canadian NPRI	Not listed.
Alberta Designated Substances	Not listed.
Ontario Designated Substances	Not listed.
Quebec Designated Substances	Not listed.

Section 16 – Other Information

Emergency Response Guide (ERG) Number 115 (UN 1972)

<u>NFPA</u>

Health Hazard	3 - Short exposure could cause serious temporary or residual injury even
	though prompt medical attention was given.
Fire Hazard	4 - Rapidly or completely vaporize at atmospheric pressure and normal
	ambient temperature, or which are readily dispersed in air and which will
	burn readily.
Reactivity	0 - Normally stable, even under fire exposure conditions, and are not
	reactive with water.
Specific Hazard	SA - This denotes gases which are simple asphyxiants.



HMIS Rating

Health	3 - Serious Hazard
Flammability	4 - Severe Hazard
Physical	3 - Serious Hazard



Material Name: Natural Gas, Refrigerated Liquid ((Cryogenic Liquid) with High Methane Content)

Location: United States

Canada WHMIS

Classification

A – Compressed gas

- B Flammable/Combustible Material
- 2 Flammable Gases
- Class Division





Internal Use/Information Purposes Only

Date of Issue: March 19, 2018

DISCLAIMER OF EXPRESSED AND IMPLIED WARRANTIES:

(1) Reasonable care has been taken in the preparation of this document, and represents the opinions of, and information available to, Eagle LNG as of the date of this SDS. Since the use of the information contained herein and the conditions of the use of the product are not within the control of Ferus, each individual should make a determination as to the suitability of the information for their particular purpose(s) as well as the conditions of safe use of the product. Ferus extends no warranties and make no representations as to the accuracy or completeness of the information contained herein, and assume no responsibility regarding the suitability of this information for the user's intended purposes or for the consequences of its use. (2) Ferus asks users of this product to study this SDS and become aware of product hazards and safety information. To promote safe use of this product, a user should (1) notify employees, agents, and contractors of the information in this SDS and of any other known product hazards and safety information, (2) furnish this information to each purchaser of the product, and (3) ask each purchaser to notify its employees and customers of the product hazards and safety information.