

SECTION 1: IDENTIFICATION

1.1 Product Identifier

Product Form: Mixture
Product Name: Natural Gas Liquid (Y-Grade)
Synonyms: Y-Grade, Raw Feed, Liquefied Petroleum Gas, NGL

1.2 Intended Use of the Product

Use of the substance/mixture: Feedstock, Fuel

1.3 Name, Address, and Telephone of the Responsible Party

Company:

Southcross Energy
2103 CityWest BLVD, Suite 900
Houston, TX 77042
T (713) 580-0265

1.4 Emergency Telephone Number

Emergency Number: (877) 880-9022
1-800-424-9300 (CHEMTREC)

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the Substance or Mixture

GHS-US Classification

Flam. Gas 1	H220
Flam. Liquid 1	H224
Liquefied gas	H280
Asp. Tox. 1	H304
Skin Irrit. 2	H315
Muta. 1B	H340
Carc. 1A	H350
STOT SE 3	H336
STOT RE 2	H373
Aquatic Acute 3	H402
Aquatic Chronic 3	H412

Full text of H-phrases: see section 16

2.2 Label Elements

GHS-US Labeling

Hazard Pictograms

(GHS-US):



GHS02

GHS04

GHS07

GHS08

GHS09

Signal Word (GHS-US):

Danger

Hazard Statements

(GHS-US)

H220 – Extremely flammable gas
H224 – Extremely flammable liquid and vapor
H280 – Contains gas under pressure; may explode if heated
H304 – May be fatal if swallowed and enters airways
H315 – Causes skin irritation
H340 – May cause genetic defects

Natural Gas Liquid (Y-Grade)

Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

- H350 – May cause cancer
- H373 – May cause damage to organs through prolonged or repeated exposure
- H380 – May displace oxygen and cause rapid suffocation
- H402 – Harmful to aquatic life
- H412 – Harmful to aquatic life with long lasting effects

Hazards not Otherwise Classified

May contain or release poisonous hydrogen sulfide gas

Precautionary Statements (GHS-US)

- 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
- P233 – Keep container tightly closed
- P240 – Ground/bond container and receiving equipment
- P241 – Use with explosion-proof equipment
- P242 – Use only non-sparking tools
- P243 – Take precautionary measures against static discharge
- P260 – Do not breathe gas/mist/vapors/spray
- P271 – Use only outdoors or in a well-ventilated area
- P273 – Avoid release to the environment
- P280 – Wear protective gloves/protective clothing/eye protection/face protection
- P301+P310 – If swallowed: Immediately call a poison center/doctor/...
- P303+P361+P353 – IF ON SKIN: Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
- P304+P340 – IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
- P308+P313 – If exposed or concerned: Get medical advice/attention
- P312 – Call a POISON CENTER or doctor/physician if you feel unwell
- P313 – If skin irritation occurs: Get medical advice/attention
- P314 – Get medical advice/attention if you feel unwell
- P331 – Do NOT induce vomiting
- P362 – Take off contaminated clothing and wash before reuse
- P370+P378 – In case of fire: Use dry chemical, carbon dioxide, or foam for extinction
- P377 – Leaking gas fire: Do not extinguish, unless leak can be stopped safely
- P381 – In case of leaking gas fire, eliminate all ignition sources if safe to do so
- P391 – Collect spillage
- P403+P235 – Store in a well-ventilated place. Keep cool
- P405 – Store locked up
- P410+P403 – Protect from sunlight. Store in a well-ventilated place
- P501 – Dispose of contents/container to approved disposal facility

2.3 Other Hazards

Exposure may aggravate those with pre-existing eye, skin, or respiratory conditions. Exposure may aggravate pre-existing eye, skin, or respiratory conditions. Contact with gas escaping the container can cause frostbite. Natural gas liquid is a complex mixture of volatile hydrocarbons, the composition of which varies depending upon the source and processing method of natural gas. Typically, the hydrocarbons range from C2 to C10 with aromatic compounds including benzene, toluene, and xylene.

2.4 Unknown Acute Toxicity (GHS-US)

No data available

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substance

Not applicable

Natural Gas Liquid (Y-Grade)

Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

3.2 Mixture

Name	Product Identifier (CAS No)	%	GHS-US Classification
Butane	106-97-8	< 38	Flam. Gas 1, H220 Compressed gas, H280 Simple Asphy, H380
Isobutane	75-28-5	< 38	Flam. Gas 1, H220 Compressed gas, H280 Simple Asphy, H380
Pentane	109-66-0	< 28	Flam. Liq. 2, H225 Asp. Tox. 1, H304 STOT SE 3, H336 Aquatic Acute 2, H401; Aquatic Chronic 2, H411
Isopentane	78-78-4	< 28	Flam. Liq. 1, H224 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Acute 2, H401; Aquatic Chronic 2, H411
Propane	74-98-6	< 25	Flam. Gas 1, H220 Simple Asphy, H380 Compressed gas, H280
Methane	74-82-8	< 25	Simple Asphy, H380 Flam. Gas 1, H220 Compressed gas, H280
Ethane	74-84-0	< 10	Flam. Gas 1, H220 Compressed gas, H280 Simple Asphy, H380
n-Heptane	142-82-5	< 10	Flam. Liq. 2, H225 Skin Irrit. 2, H315 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Acute 1, H400; Aquatic Chronic 1, H410
Isoheptane	31394-54-4	< 10	Flam. Liq. 2, H225 Skin Irrit. 2, H315 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Chronic 1, H410
Hexane, branched and linear	92112-69-1	< 8	Flam. Liq. 2, H225 Skin Irrit. 2, H315 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Chronic 2, H411
Hexane	110-54-3	< 4	Flam. Liq. 2, H225 Skin Irrit. 2, H315 Repr. 2, H361 STOT SE 3, H336 STOT RE 2, H373 Asp. Tox. 1, H304 Aquatic Acute 2, H401; Aquatic Chronic 2, H411
Octane	111-65-9	< 3.5	Flam. Liq. 2, H225 Asp. Tox. 1, H304

Natural Gas Liquid (Y-Grade)

Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

			Skin Irrit. 2, H315 STOT SE 3, H336
Naphtha, petroleum, hydrotreated heavy	64742-48-9	< 2.5	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Muta. 1B, H340 Carc. 1B, H350 Repr. 2, H361 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Chronic 2, H411
Naphtha, petroleum, hydrotreated light	64742-49-0	< 2.5	Flam. Liq. 1, H224 Skin Irrit. 2, H315 Muta. 1B, H340 Carc. 1B, H350 Repr. 2, H361 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Acute 2, H401; Aquatic Chronic 2, H411
Benzene	71-43-2	< 2	Flam. Liq. 2, H225 Muta. 1B, H340 Carc. 1A, H350 STOT RE 1, H372 Asp. Tox. 1, H304 Skin Irrit. 2, H315 Eye Irrit. 2A, H319
Toluene	108-88-3	< 2	Flam. Liq. 2, H225 Skin Irrit. 2, H315 Repr. 2, H361 STOT SE 3, H336 STOT RE 2, H373 Asp. Tox. 1, H304 Aquatic Acute 2, H401; Aquatic Chronic 3, H412
Xylenes (o-, m-, p- isomers)	1330-20-7	< 1.5	Flam. Liq. 3, H226 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation:vapour), H332 Skin Irrit. 2, H315 Asp. Tox. 1, H304 Aquatic Acute 2, H401
Hydrogen sulfide	7783-06-4	< 0.2	Flam. Gas 1, H220 Press. Gas, H280 Acute Tox. 2, H330

Additional information:

For the listed ingredient(s), the identity and/or exact percentage(s) are being withheld as a trade secret.

Full text of H-phrases: see section 16.

SECTION 4: FIRST AID MEASURES

4.1. Description of First Aid Measures

First-aid Measures General: Never give anything by mouth to an unconscious person. If frostbite or freezing occurs, immediately flush with plenty of lukewarm water to GENTLY warm the affected area. Do not use hot water. Do not rub affected area. Get immediate medical attention. If exposed or concerned: Get medical advice/attention. If you feel unwell, seek medical advice (show the label where possible).

Natural Gas Liquid (Y-Grade)

Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

First-aid Measures After Inhalation: If exposed or concerned: Get medical advice/attention. Obtain medical attention if breathing difficulty persists. First, take proper precautions to ensure your own safety before attempting rescue (e.g., wear appropriate respiratory protective equipment, use the buddy system), then remove the exposed person to fresh air. Keep at rest in a position comfortable for breathing.

First-aid Measures After Skin Contact: Remove contaminated clothing. Drench affected area with water for at least 15 minutes. Thaw frosted parts with lukewarm water. Do not rub affected area. Obtain medical attention if irritation persists. Remove contaminated clothing. Drench affected area with water for at least 15 minutes. Obtain medical attention if irritation develops or persists. Thaw frosted parts with lukewarm water. Do not rub affected area. Get immediate medical advice/attention.

First-aid Measures After Eye Contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If frostbite or freezing occurs, immediately flush with plenty of lukewarm water to GENTLY warm the affected area. Do not use hot water. Do not rub affected area. Get immediate medical attention. Obtain medical attention if irritation develops or persists. Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention.

First-aid Measures After Ingestion: Rinse mouth. Do NOT induce vomiting. Seek medical attention immediately. Obtain medical attention.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/Injuries: Asphyxiant gas. May cause frostbite on contact with the liquid. Causes skin irritation. May cause drowsiness and dizziness. May cause genetic defects. May cause cancer. Suspected of damaging fertility or the unborn child. Causes damage to organs through prolonged or repeated exposure. Asphyxia by lack of oxygen: risk of death.

Symptoms/Injuries After Inhalation: Gas can be toxic as a simple asphyxiant by displacing oxygen from the air. In elevated concentrations may cause asphyxiation, central nervous system effects, and increased breathing rate. Symptoms of asphyxiation include headache, dizziness, rapid breathing, increased pulse, mood changes, tremors, cyanosis, muscular weakness, narcosis, numbness of the extremities, unconsciousness, and death. Respiratory tract irritation.

Symptoms/Injuries After Skin Contact: May cause mild skin irritation. Contact with gas/liquid escaping the container can cause frostbite and freeze burns. Redness, pain, swelling, itching, burning, dryness, and dermatitis.

Symptoms/Injuries After Eye Contact: Contact with gas/liquid escaping the container can cause frostbite, freeze burns, and permanent eye damage.

Symptoms/Injuries After Ingestion: Not considered a potential route of exposure, but contact with gas/liquid escaping the container can cause freeze burns and frostbite.

Chronic Symptoms: In elevated concentrations may cause asphyxiation, central nervous system effects, and increased breathing rate. Symptoms of asphyxiation include headache, dizziness, rapid breathing, increased pulse, mood changes, tremors, cyanosis, muscular weakness, narcosis, numbness of the extremities, unconsciousness, and death. May cause genetic defects. May cause cancer. Suspected of damaging fertility or the unborn child. Causes damage to organs through prolonged or repeated exposure.

4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed

If exposed or concerned, get medical advice and attention. If exposed or concerned, get medical advice and attention. If medical advice is needed, have product container or label at hand.

SECTION 5: FIRE-FIGHTING MEASURES

5.1. Extinguishing Media

Suitable Extinguishing Media: Use extinguishing media appropriate for surrounding fire. Do not extinguish burning gas if flow cannot be shut off immediately. Extinguish secondary FIRES with appropriate materials. **Unsuitable Extinguishing Media:** Do not use a heavy water stream. Use of heavy stream of water may spread fire. Use of heavy stream of water may spread fire.

5.2. Special Hazards Arising from the Substance or Mixture

Fire Hazard: Extremely flammable gas.

Explosion Hazard: May form flammable/explosive vapor-air mixture. Heating may cause an explosion. Heat may build pressure, rupturing closed containers, spreading fire and increasing risk of burns and injuries. Container may explode in heat of fire.

Natural Gas Liquid (Y-Grade)

Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Reactivity: Hazardous reactions will not occur under normal conditions.

5.3. Advice for Firefighters

Precautionary Measures Fire: Exercise caution when fighting any chemical fire.

Firefighting Instructions: Leaking gas fire: Do not extinguish, unless leak can be stopped safely. In case of leaking gas fire, eliminate all ignition sources if safe to do so. Use water spray or fog for cooling exposed containers. Leaking gas fire: Do not extinguish, unless leak can be stopped safely. Eliminate all ignition sources if safe to do so. Fight fire remotely due to the risk of explosion.

Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

Other Information: Use water spray to disperse vapors. Do not allow run-off from firefighting to enter drains or water courses.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

General Measures: Use special care to avoid static electric charges. Eliminate every possible source of ignition. Keep away from extremely high or low temperatures, ignition sources, and incompatible materials. - No smoking. Ruptured cylinders may rocket. Do NOT breathe (dust, vapor, mist, gas). Do not get in eyes, on skin, or on clothing. Do not breathe gas. Do not handle until all safety precautions have been read and understood. Do not breathe vapors, mist, or spray.

6.1.1. For Non-emergency Personnel

Protective Equipment: Use appropriate personal protection equipment (PPE). Emergency Procedures: Evacuate unnecessary personnel.

6.1.2. For Emergency Responders

Protective Equipment: Equip cleanup crew with proper protection. Emergency Procedures: Upon arrival at the scene, a first responder is expected to recognize the presence of dangerous goods, protect oneself and the public, secure the area, and call for the assistance of trained personnel as soon as conditions permit. Evacuate unnecessary personnel, isolate, and ventilate area. Ventilate area.

6.2. Environmental Precautions

Prevent entry to sewers and public waters. Avoid release to the environment. Collect spillage.

6.3. Methods and Material for Containment and Cleaning Up

For Containment: As an immediate precautionary measure, isolate spill or leak area in all directions. Remove ignition sources. Stop leak, if possible, without risk. Methods for Cleaning Up: Clean up spills immediately and dispose of waste safely. Stop the source of the release, if safe to do so. Consider the use of water spray to disperse vapors. Isolate the area until gas has dispersed. Ventilate and gas test area before entering. Eliminate all ignition sources. Contact competent authorities after a spill. Transfer spilled material to a suitable container for disposal.

6.4. Reference to Other Sections

See heading 8, Exposure Controls and Personal Protection. See Heading 8. Exposure controls and personal protection. See Section 13, Disposal Considerations.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for Safe Handling

Additional Hazards When Processed: Handle empty containers with care because residual vapors are flammable. Extremely flammable gas. Ruptured cylinders may rocket. Do not pressurize, cut, or weld containers. Do not expose to heat, or ignition sources as this could cause an explosion. Do not pressurize, cut, or weld containers. Asphyxiating gas at high concentrations.

Precautions for Safe Handling: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat, sparks, open flames, hot surfaces, ignition sources, incompatible materials. - No smoking. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Avoid contact with eyes, skin and clothing. Do not breathe gas. Do not get in eyes, on skin, or on clothing. Do NOT breathe (dust, vapor, mist, gas).

Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking, or smoking and again when leaving work. Handle in accordance with good industrial hygiene and safety procedures.

Natural Gas Liquid (Y-Grade)

Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

7.2. Conditions for Safe Storage, Including Any Incompatibilities

Technical Measures: Proper grounding procedures to avoid static electricity should be followed. Comply with applicable regulations.

Storage Conditions: Store in a dry, cool, and well-ventilated place. Keep container closed when not in use. Keep in fireproof place. Store locked up. Keep/Store away from direct sunlight, extremely high or low temperatures, ignition sources, incompatible materials. Store in a dry, cool place. Cylinders should be stored upright with valve protection cap in place and firmly secured to prevent falling.

Incompatible Products: Strong acids. Strong bases. Strong oxidizers. Strong acids, strong bases, strong oxidizers.

7.3. Specific End Use(s)

Feedstock, Fuel

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control Parameters

For substances listed in section 3 that are not listed here, there are no established exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), AIHA (WEEL), NIOSH (REL), or OSHA (PEL).

Butane (106-97-8)		
USA ACGIH	ACGIH STEL (ppm)	1000 ppm
USA NIOSH	NIOSH REL (TWA) (mg/m ³)	1900 mg/m ³
USA NIOSH	NIOSH REL (TWA) (ppm)	800 ppm
Propane (74-98-6)		
USA NIOSH	NIOSH REL (TWA) (mg/m ³)	1800 mg/m ³
USA NIOSH	NIOSH REL (TWA) (ppm)	1000 ppm
USA IDLH	US IDLH (ppm)	2100 ppm (10% LEL)
USA OSHA	OSHA PEL (TWA) (mg/m ³)	1800 mg/m ³
USA OSHA	OSHA PEL (TWA) (ppm)	1000 ppm
Isobutane (75-28-5)		
USA ACGIH	ACGIH STEL (ppm)	1000 ppm
USA NIOSH	NIOSH REL (TWA) (mg/m ³)	1900 mg/m ³
USA NIOSH	NIOSH REL (TWA) (ppm)	800 ppm
Pentane (109-66-0)		
USA ACGIH	ACGIH TWA (ppm)	1000 ppm
USA NIOSH	NIOSH REL (TWA) (mg/m ³)	350 mg/m ³
USA NIOSH	NIOSH REL (TWA) (ppm)	120 ppm
USA NIOSH	NIOSH REL (ceiling) (mg/m ³)	1800 mg/m ³
USA NIOSH	NIOSH REL (ceiling) (ppm)	610 ppm
USA IDLH	US IDLH (ppm)	1500 ppm (10% LEL)
USA OSHA	OSHA PEL (TWA) (mg/m ³)	2950 mg/m ³
USA OSHA	OSHA PEL (TWA) (ppm)	1000 ppm
Isopentane (78-78-4)		
USA ACGIH	ACGIH TWA (ppm)	1000 ppm
Hexane (110-54-3)		
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)

Natural Gas Liquid (Y-Grade)

Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

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)
USA OSHA	OSHA PEL (TWA) (mg/m ³)	1800 mg/m ³
USA OSHA	OSHA PEL (TWA) (ppm)	500 ppm
n-Heptane (142-82-5)		
USA ACGIH	ACGIH TWA (ppm)	400 ppm
USA ACGIH	ACGIH STEL (ppm)	500 ppm
USA NIOSH	NIOSH REL (TWA) (mg/m ³)	350 mg/m ³
USA NIOSH	NIOSH REL (TWA) (ppm)	85 ppm
USA NIOSH	NIOSH REL (ceiling) (mg/m ³)	1800 mg/m ³
USA NIOSH	NIOSH REL (ceiling) (ppm)	440 ppm
USA IDLH	US IDLH (ppm)	750 ppm
USA OSHA	OSHA PEL (TWA) (mg/m ³)	2000 mg/m ³
USA OSHA	OSHA PEL (TWA) (ppm)	500 ppm
Octane (111-65-9)		
USA ACGIH	ACGIH TWA (ppm)	300 ppm
USA NIOSH	NIOSH REL (TWA) (mg/m ³)	350 mg/m ³
USA NIOSH	NIOSH REL (TWA) (ppm)	75 ppm
USA NIOSH	NIOSH REL (ceiling) (mg/m ³)	1800 mg/m ³
USA NIOSH	NIOSH REL (ceiling) (ppm)	385 ppm
USA IDLH	US IDLH (ppm)	1000 ppm (10% LEL)
USA OSHA	OSHA PEL (TWA) (mg/m ³)	2350 mg/m ³
USA OSHA	OSHA PEL (TWA) (ppm)	500 ppm
Benzene (71-43-2)		
USA ACGIH	ACGIH TWA (ppm)	0.5 ppm
USA ACGIH	ACGIH STEL (ppm)	2.5 ppm
USA ACGIH	ACGIH chemical category	Skin - potential significant contribution to overall exposure by the cutaneous route, Confirmed Human Carcinogen
USA ACGIH	Biological Exposure Indices (BEI)	25 µg/g Kreatinin (Medium: urine - Time: end of shift - Parameter: S-Phenylmercapturic acid (background) 500 µg/g Kreatinin (Medium: urine - Time: end of shift - Parameter: t,t-Muconic acid (background))
USA NIOSH	NIOSH REL (TWA) (ppm)	0.1 ppm
USA NIOSH	NIOSH REL (STEL) (ppm)	1 ppm
USA IDLH	US IDLH (ppm)	500 ppm
USA OSHA	OSHA PEL (TWA) (ppm)	10 ppm 1 ppm
USA OSHA	OSHA PEL (STEL) (ppm)	5 ppm (see 29 CFR 1910.1028)
USA OSHA	OSHA PEL (Ceiling) (ppm)	25 ppm
Toluene (108-88-3)		
USA ACGIH	ACGIH TWA (ppm)	20 ppm
USA ACGIH	ACGIH chemical category	Not Classifiable as a Human Carcinogen
USA ACGIH	Biological Exposure Indices (BEI)	0.02 mg/l (Medium: blood - Time: prior to last shift of workweek - Parameter: Toluene) 0.03 mg/l (Medium: urine - Time: end of shift -

Natural Gas Liquid (Y-Grade)

Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

		Parameter: Toluene) 0.3 mg/g Kreatinin (Medium: urine - Time: end of shift - Parameter: o-Cresol with hydrolysis (background)
USA NIOSH	NIOSH REL (TWA) (mg/m ³)	375 mg/m ³
USA NIOSH	NIOSH REL (TWA) (ppm)	100 ppm
USA NIOSH	NIOSH REL (STEL) (mg/m ³)	560 mg/m ³
USA NIOSH	NIOSH REL (STEL) (ppm)	150 ppm
USA IDLH	US IDLH (ppm)	500 ppm
USA OSHA	OSHA PEL (TWA) (ppm)	200 ppm
USA OSHA	OSHA PEL (Ceiling) (ppm)	300 ppm
Xylenes (o-, m-, p- isomers) (1330-20-7)		
USA ACGIH	ACGIH TWA (ppm)	100 ppm
USA ACGIH	ACGIH STEL (ppm)	150 ppm
USA ACGIH	ACGIH chemical category	Not Classifiable as a Human Carcinogen
USA ACGIH	Biological Exposure Indices (BEI)	1.5 g/g Kreatinin (Medium: urine - Time: end of shift - Parameter: Methylhippuric acids)
USA OSHA	OSHA PEL (TWA) (mg/m ³)	435 mg/m ³
USA OSHA	OSHA PEL (TWA) (ppm)	100 ppm
Hydrogen sulfide (7783-06-4)		
USA ACGIH	ACGIH TWA (ppm)	1 ppm
USA ACGIH	ACGIH STEL (ppm)	5 ppm
USA OSHA	OSHA PEL (Ceiling) (ppm)	20 ppm

8.2. Exposure Controls

Appropriate Engineering Controls: Gas detectors should be used when flammable gases/vapors may be released. Oxygen detectors should be used when asphyxiating gases may be released. Use explosion-proof equipment. Ensure adequate ventilation, especially in confined areas. Ensure all national/local regulations are observed. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Gas detectors should be used when flammable gases or vapors may be released.

Personal Protective Equipment: Protective clothing. Protective goggles. Gloves. Insufficient ventilation: wear respiratory protection. Respiratory protection of the dependent type.



Materials for Protective Clothing: Chemically resistant materials and fabrics. Wear fire/flame resistant/retardant clothing.

Hand Protection: Wear chemically resistant protective gloves. Wear protective gloves. If material is cold, wear thermally resistant protective gloves.

Eye Protection: Chemical goggles or face shield. Chemical safety goggles.

Skin and Body Protection: Wear suitable protective clothing.

Respiratory Protection: Use a NIOSH-approved self-contained breathing apparatus whenever exposure may exceed established Occupational Exposure Limits.

Natural Gas Liquid (Y-Grade)

Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Thermal Hazard Protection: Wear suitable protective clothing. If material is cold, wear thermally resistant protective gloves. Wear thermally resistant protective clothing.

Other Information: When using, do not eat, drink, or smoke.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on Basic Physical and Chemical Properties

Physical State:	Gas
Appearance:	Colorless Liquefied Gas
Odor:	Petroleum
Odor Threshold:	No data available
pH:	No data available
Evaporation Rate:	No data available
Melting Point:	No data available
Freezing Point:	No data available
Boiling Point:	-140 °F (-95.56 °C)
Flash Point:	-50 °F (-45.56 °C)
Auto-ignition Temperature:	450 °F (232.22 °C)
Decomposition Temperature:	No data available
Flammability (solid, gas):	Extremely flammable gas
Vapor Pressure:	1500 - 200 psia @ 100°F (Reid VP)
Relative Vapor Density at 20 °C:	> 1
Relative Density:	0.65 - 0.75
Solubility:	Water: Insoluble
Partition Coefficient: N-Octanol/Water:	No data available
Viscosity:	No data available
Explosive Properties	Contains gas under pressure; may explode if heated.
Lower Flammable Limit	< 1%
Upper Flammable Limit	8%

9.2. Other Information

VOC content:	100%
Gas Group:	Liquefied gas

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity: Hazardous reactions will not occur under normal conditions.

10.2. Chemical Stability: Extremely flammable gas. Contains gas under pressure; may explode if heated.

10.3. Possibility of Hazardous Reactions: Hazardous polymerization will not occur.

10.4. Conditions to Avoid: Direct sunlight. Extremely high or low temperatures. Open flame. Overheating. Heat. Sparks. Ignition sources. Incompatible materials.

10.5. Incompatible Materials: Strong oxidizers.

10.6. Hazardous Decomposition Products: Carbon oxides (CO, CO₂). hydrocarbons.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on Toxicological Effects

Acute Toxicity: Not classified

Propane (74-98-6)	
LC50 Inhalation Rat	658 mg/l/4h
Ethane (74-84-0)	
LC50 Inhalation Rat	658 mg/l/4h
Butane (106-97-8)	
LC50 Inhalation Rat	30957 mg/m ³ (Exposure time: 4 h)

Natural Gas Liquid (Y-Grade)

Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Isobutane (75-28-5)	
LC50 Inhalation Rat	658 mg/l/4h
LC50 Inhalation Rat	11000 ppm
Pentane (109-66-0)	
LD50 Dermal Rabbit	3000 mg/kg
LC50 Inhalation Rat	364 g/m ³ (Exposure time: 4 h)
LC50 Inhalation Rat	> 20 mg/l/4h
Hexane (110-54-3)	
LD50 Oral Rat	25 g/kg
LD50 Dermal Rabbit	3000 mg/kg
LC50 Inhalation Rat	169 mg/l/4h
LC50 Inhalation Rat	48000 ppm/4h
Hexane, branched and linear (92112-69-1)	
LD50 Oral Rat	15000 mg/kg
n-Heptane (142-82-5)	
LD50 Oral Rat	> 5000 mg/kg
LD50 Dermal Rabbit	3000 mg/kg
LC50 Inhalation Rat	103 g/m ³ (Exposure time: 4 h)
LC50 Inhalation Rat	103.2 mg/l/4h
Octane (111-65-9)	
LC50 Inhalation Rat	118 g/m ³ (Exposure time: 4 h)
LC50 Inhalation Rat	118 mg/l/4h
Naphtha, petroleum, hydrotreated heavy (64742-48-9)	
LD50 Oral Rat	> 5000 mg/kg
LD50 Dermal Rabbit	> 3160 mg/kg
Naphtha, petroleum, hydrotreated light (64742-49-0)	
LD50 Oral Rat	> 5000 mg/kg
LD50 Dermal Rabbit	> 3160 mg/kg
LC50 Inhalation Rat	73680 ppm/4h
Benzene (71-43-2)	
LD50 Oral Rat	3306 mg/kg
LD50 Dermal Rabbit	> 8200 mg/kg
LC50 Inhalation Rat	44.66 mg/l/4h
LC50 Inhalation Rat	44.66 mg/l/4h
Toluene (108-88-3)	
LD50 Oral Rat	5580 mg/kg
LD50 Dermal Rabbit	12000 mg/kg
LC50 Inhalation Rat	12.5 mg/l/4h
LC50 Inhalation Rat	25.7 mg/l/4h
Xylenes (o-, m-, p- isomers) (1330-20-7)	
LD50 Oral Rat	> 5000 mg/kg
LD50 Dermal Rabbit	> 4350 mg/k
LC50 Inhalation Rat	29.08 mg/l/4h
LC50 Inhalation Rat	29.08 mg/l/4h
LC50 Inhalation Rat	6247 ppm/4h (species: Sprague-Dawley)

Natural Gas Liquid (Y-Grade)

Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

ATE (Dermal)	1,100.00 mg/kg body weight
ATE (Gases)	6,247.00 ppmV/4h
ATE (Vapors)	11.00 mg/l/4h

Skin Corrosion/Irritation: Causes skin irritation.
 Serious Eye Damage/Irritation: Not classified
 Respiratory or Skin Sensitization: Not classified
 Germ Cell Mutagenicity: May cause genetic defects.
 Carcinogenicity: May cause cancer.

Benzene (71-43-2)	
IARC group	1
National Toxicology Program (NTP) Status	Evidence of Carcinogenicity, Known Human Carcinogens.
OSHA Hazard Communication Carcinogen List	In OSHA Hazard Communication Carcinogen list.
OSHA Specifically Regulated Carcinogen List	In OSHA Specifically Regulated Carcinogen list.
Toluene (108-88-3)	
IARC group	3
Xylenes (o-, m-, p- isomers) (1330-20-7)	
IARC group	3

Reproductive Toxicity: Suspected of damaging fertility or the unborn child.
Specific Target Organ Toxicity (Single Exposure): May cause drowsiness or dizziness.
Specific Target Organ Toxicity (Repeated Exposure): Causes damage to organs through prolonged or repeated exposure.
Aspiration Hazard: Not classified
Symptoms/Injuries After Inhalation: Gas can be toxic as a simple asphyxiant by displacing oxygen from the air. In elevated concentrations may cause asphyxiation, central nervous system effects, and increased breathing rate. Symptoms of asphyxiation include headache, dizziness, rapid breathing, increased pulse, mood changes, tremors, cyanosis, muscular weakness, narcosis, numbness of the extremities, unconsciousness, and death. Respiratory tract irritation.
Symptoms/Injuries After Skin Contact: May cause mild skin irritation. Contact with gas/liquid escaping the container can cause frostbite and freeze burns. Redness, pain, swelling, itching, burning, dryness, and dermatitis.
Symptoms/Injuries After Eye Contact: Contact with gas/liquid escaping the container can cause frostbite, freeze burns, and permanent eye damage.
Symptoms/Injuries After Ingestion: Not considered a potential route of exposure, but contact with gas/liquid escaping the container can cause freeze burns and frostbite.
Chronic Symptoms: In elevated concentrations may cause asphyxiation, central nervous system effects, and increased breathing rate. Symptoms of asphyxiation include headache, dizziness, rapid breathing, increased pulse, mood changes, tremors, cyanosis, muscular weakness, narcosis, numbness of the extremities, unconsciousness, and death. May cause genetic defects. May cause cancer. Suspected of damaging fertility or the unborn child. Causes damage to organs through prolonged or repeated exposure.

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

Ecology - General

Toxic to aquatic life with long lasting effects.

Pentane (109-66-0)	
LC50 Fish 1	9.87 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss)
EC50 Daphnia 1	9.74 mg/l (Exposure time: 48 h - Species: Daphnia magna)
LC 50 Fish 2	11.59 mg/l (Exposure time: 96 h - Species: Pimephales promelas)

Natural Gas Liquid (Y-Grade)

Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Isopentane (78-78-4)	
EC50 Daphnia 1	2.3 mg/l (Exposure time: 48 h - Species: Daphnia magna)
Hexane (110-54-3)	
LC50 Fish 1	2.1 - 2.98 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])
EC50 Daphnia 1	3.88 mg/l
n-Heptane (142-82-5)	
LC50 Fish 1	375.0 mg/l (Exposure time: 96 h - Species: Cichlid fish)
EC50 Daphnia 1	0.1 mg/l
Octane (111-65-9)	
EC50 Daphnia 1	0.38 mg/l (Exposure time: 48 h - Species: water flea)
Naphtha, petroleum, hydrotreated heavy (64742-48-9)	
LC50 Fish 1	2200 mg/l (Exposure time: 96 h - Species: Pimephales promelas)
Naphtha, petroleum, hydrotreated light (64742-49-0)	
LC50 Fish 1	8.2 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])
Benzene (71-43-2)	
LC50 Fish 1	10.7 - 14.7 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])
EC50 Daphnia 1	8.76 - 15.6 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])
LC 50 Fish 2	5.3 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [flow-through])
EC50 Daphnia 2	10 mg/l (Exposure time: 48 h - Species: Daphnia magna)
Toluene (108-88-3)	
LC50 Fish 1	15.22 (15.22 - 19.05) mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])
EC50 Daphnia 1	5.46 (5.46 - 9.83) mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])
LC 50 Fish 2	12.6 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])
EC50 Daphnia 2	11.5 mg/l (Exposure time: 48 h - Species: Daphnia magna)
NOEC chronic crustacea	0.74 mg/l (Ceriodaphnia dubia)
Xylenes (o-, m-, p- isomers) (1330-20-7)	
LC50 Fish 1	3.3 mg/l
EC50 Daphnia 1	3.82 mg/l (Exposure time: 48 h - Species: water flea)
LC 50 Fish 2	2.661 (2.661 - 4.093) mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [static])
NOEC chronic crustacea	1.17

12.2. Persistence and Degradability

Natural Gas Liquid	
Persistence and Degradability	May cause long-term adverse effects in the environment.

12.3. Bioaccumulative Potential

Natural Gas Liquid	
Bioaccumulative Potential	Not established.

Propane (74-98-6)	
Log Pow	2.3
Ethane (74-84-0)	
Log Pow	≤ 2.8
Butane (106-97-8)	
Log Pow	2.89
Isobutane (75-28-5)	

Natural Gas Liquid (Y-Grade)

Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

BCF fish 1	1.57 - 1.97
Log Pow	2.88 (at 20 °C)
Pentane (109-66-0)	
Log Pow	3.39
Isopentane (78-78-4)	
Log Pow	3.2 - 3.3
n-Heptane (142-82-5)	
Log Pow	4.66
Octane (111-65-9)	
Log Pow	5.18
Benzene (71-43-2)	
BCF fish 1	3.5 - 4.4
Log Pow	1.83
Toluene (108-88-3)	
Log Pow	2.65
Xylenes (o-, m-, p- isomers) (1330-20-7)	
BCF fish 1	0.6 (0.6 - 15)
Log Pow	2.77 - 3.15

12.4. Mobility in Soil No additional information available

12.5. Other Adverse Effects

Other Information: Avoid release to the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste Disposal Recommendations: Dispose of waste material in accordance with all local, regional, national, and international regulations.

Additional Information: Handle empty containers with care because residual vapors are flammable. Empty gas cylinders should be returned to the vendor for recycling or refilling. Container may remain hazardous when empty. Continue to observe all precautions. Do not puncture or incinerate container.

Ecology – Waste Materials: Avoid release to the environment. This material is hazardous to the aquatic environment. Keep out of sewers and waterways.

SECTION 14: TRANSPORT INFORMATION

14.1. In Accordance with DOT

Proper Shipping Name: PETROLEUM GASES, LIQUEFIED

Hazard Class: 2.1

Identification Number: UN1075

Label Codes: 2.1

Marine Pollutant: Marine pollutant

ERG Number: 115

14.1. In Accordance with IMDG

Proper Shipping Name: PETROLEUM GASES, LIQUEFIED

Hazard Class: 2.1

Identification Number: UN1075

Label Codes: 2.1

EmS-No. (Fire): F-D

EmS-No. (Spillage): S-U



Natural Gas Liquid (Y-Grade)

Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Marine Pollutant: Marine pollutant

14.1. In Accordance with IATA

Proper Shipping Name: PETROLEUM GASES, LIQUEFIED

Identification Number: UN1075

Hazard Class: 2

Label Codes: 2.1

Division: 2.1

ERG Code (IATA): 10L



SECTION 15: REGULATORY INFORMATION

15.1 US Federal Regulations

Natural Gas Liquids (Y-Grade)	
Not listed on the United States TSCA (Toxic Substances Control Act) inventory	
Propane (74-98-6)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
Ethane (74-84-0)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
Butane (106-97-8)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
Methane (74-82-8)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
Isobutane (75-28-5)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
Pentane (109-66-0)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
EPA TSCA Regulatory Flag	T - T - indicates a substance that is the subject of a Section 4 test rule under TSCA.
Isopentane (78-78-4)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
Hexane (110-54-3)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
Subject to reporting requirements of United States SARA Section 313	
SARA Section 313 - Emission Reporting	1.0 %
n-Heptane (142-82-5)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
EPA TSCA Regulatory Flag	T - T - indicates a substance that is the subject of a Section 4 test rule under TSCA.
Isoheptane (31394-54-4)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
Octane (111-65-9)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
Naphtha, petroleum, hydrotreated heavy (64742-48-9)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
Naphtha, petroleum, hydrotreated light (64742-49-0)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	

Natural Gas Liquid (Y-Grade)

Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Benzene (71-43-2)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory Subject to reporting requirements of United States SARA Section 313	
RQ (Reportable quantity, section 304 of EPA's List of Lists)	10 lb.
SARA Section 311/312 Hazard Classes	Fire hazard Immediate (acute) health hazard Delayed (chronic) health hazard
SARA Section 313 - Emission Reporting	0.1 %

Toluene (108-88-3)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory Subject to reporting requirements of United States SARA Section 313	
RQ (Reportable quantity, section 304 of EPA's List of Lists)	1000 lb.
SARA Section 313 - Emission Reporting	1.0 %

Xylenes (o-, m-, p- isomers) (1330-20-7)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory Subject to reporting requirements of United States SARA Section 313	
RQ (Reportable quantity, section 304 of EPA's List of Lists)	100 lb.
SARA Section 311/312 Hazard Classes	Delayed (chronic) health hazard Fire hazard Immediate (acute) health hazard
SARA Section 313 - Emission Reporting	1.0 %

15.2 US State Regulations

Benzene (71-43-2)	
U.S. - California - Proposition 65 - Carcinogens List	WARNING: This product contains chemicals known to the State of California to cause cancer.
U.S. - California - Proposition 65 - Developmental Toxicity	WARNING: This product contains chemicals known to the State of California to cause birth defects.
U.S. - California - Proposition 65 - Reproductive Toxicity - Male	WARNING: This product contains chemicals known to the State of California to cause (Male) reproductive harm.

Toluene (108-88-3)	
U.S. - California - Proposition 65 - Developmental Toxicity	WARNING: This product contains chemicals known to the State of California to cause birth defects.

Propane (74-98-6)	
U.S. - Massachusetts - Right To Know List U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) List	

Ethane (74-84-0)	
U.S. - Massachusetts - Right To Know List U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) List	

Butane (106-97-8)	
U.S. - Massachusetts - Right To Know List U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) List	

Natural Gas Liquid (Y-Grade)

Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Methane (74-82-8)
U.S. - Massachusetts - Right To Know List U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) List
Isobutane (75-28-5)
U.S. - Massachusetts - Right To Know List U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) List
Pentane (109-66-0)
U.S. - Massachusetts - Right To Know List U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) List
Isopentane (78-78-4)
U.S. - Massachusetts - Right To Know List U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) List
Hexane (110-54-3)
U.S. - Massachusetts - Right To Know List U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) List
n-Heptane (142-82-5)
U.S. - Massachusetts - Right To Know List U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) List
Isoheptane (31394-54-4)
U.S. - Pennsylvania - RTK (Right to Know) List
Octane (111-65-9)
U.S. - Massachusetts - Right To Know List U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) List
Benzene (71-43-2)
U.S. - Massachusetts - Right To Know List U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List U.S. - Pennsylvania - RTK (Right to Know) - Special Hazardous Substances U.S. - Pennsylvania - RTK (Right to Know) List
Toluene (108-88-3)
U.S. - Massachusetts - Right To Know List U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List U.S. - Pennsylvania - RTK (Right to Know) List
Xylenes (o-, m-, p- isomers) (1330-20-7)
U.S. - Massachusetts - Right To Know List U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List U.S. - Pennsylvania - RTK (Right to Know) List
SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

Natural Gas Liquid (Y-Grade)

Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Revision Date: 03/01/2021

Other Information: This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.

GHS Full Text Phrases:

Acute Tox. 4 (Dermal)	Acute toxicity (dermal) Category 4
Acute Tox. 4 (Inhalation:vapour)	Acute toxicity (inhalation:vapour) Category 4
Aquatic Acute 1	Hazardous to the aquatic environment - Acute Hazard Category 1
Aquatic Acute 2	Hazardous to the aquatic environment - Acute Hazard Category 2
Aquatic Chronic 1	Hazardous to the aquatic environment - Chronic Hazard Category 1
Aquatic Chronic 2	Hazardous to the aquatic environment - Chronic Hazard Category 2
Aquatic Chronic 3	Hazardous to the aquatic environment - Chronic Hazard Category 3
Asp. Tox. 1	Aspiration hazard Category 1
Carc. 1A	Carcinogenicity Category 1A
Carc. 1B	Carcinogenicity Category 1B
Compressed gas	Gases under pressure Compressed gas
Eye Irrit. 2A	Serious eye damage/eye irritation Category 2A
Flam. Gas 1	Flammable gases Category 1
Flam. Liq. 1	Flammable liquids Category 1
Flam. Liq. 2	Flammable liquids Category 2
Flam. Liq. 3	Flammable liquids Category 3
Liquefied gas	Gases under pressure Liquefied gas
Muta. 1B	Germ cell mutagenicity Category 1B
Repr. 2	Reproductive toxicity Category 2
Simple Asphy	Simple Asphyxiant
Skin Irrit. 2	Skin corrosion/irritation Category 2
STOT RE 1	Specific target organ toxicity (repeated exposure) Category 1
STOT RE 2	Specific target organ toxicity (repeated exposure) Category 2
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
H220	Extremely flammable gas
H224	Extremely flammable liquid and vapor
H225	Highly flammable liquid and vapor
H226	Flammable liquid and vapor
H280	Contains gas under pressure; may explode if heated
H304	May be fatal if swallowed and enters airways
H312	Harmful in contact with skin
H315	Causes skin irritation
H319	Causes serious eye irritation
H332	Harmful if inhaled
H336	May cause drowsiness or dizziness
H340	May cause genetic defects
H350	May cause cancer
H361	Suspected of damaging fertility or the unborn child
H372	Causes damage to organs through prolonged or repeated exposure
H373	May cause damage to organs through prolonged or repeated exposure
H380	May displace oxygen and cause rapid suffocation
H400	Very toxic to aquatic life
H401	Toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects
H411	Toxic to aquatic life with long lasting effects

Natural Gas Liquid (Y-Grade)

Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

H412	Harmful to aquatic life with long lasting effects
------	---

- NFPA Health Hazard** 2 - Intense or continued exposure could cause temporary incapacitation or possible residual injury unless prompt medical attention is given.
- NFPA Fire Hazard** 4 - Will rapidly or completely vaporize at normal pressure and temperature or is readily dispersed in air and will burn readily.
- NFPA Reactivity** 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.



This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

SDS US (GHS HazCom)