1. Product and Company Identification

Material name: Natural Gas (Sweet)
Version #: 01
Revision date: 06-02-2010
CAS #: Mixture
Product use: Fuel.
Synonym(s): Marsh Gas, compressed methane, sour gas, acid gas, wellhead gas, petroleum gas, raw natural gas
Manufacturer/Supplier:
Devon US Operations
20 North Broadway
Oklahoma City, OK 73102-8260
Telephone: (405) 235-3611
Devon Canadian Operations
Calgary, AB. T2P 4H2
2000, 400 – 3rd Avenue SW.
Telephone: (403) 232-7100

Emergency:
Emergency Chemtrec:
Within the USA (800) 424-9300
Outside the USA (703) 527-3887
Devon Canada Emergency Phone:
(403) 232-7100

2. Hazards Identification

Physical state: Gas.
Appearance: Colorless Gas
Emergency overview:
DANGER
Flammable gas - may cause flash fire.
Contains n-hexane. Prolonged and/or repeated exposures may cause damage to the peripheral nervous system (e.g. fingers, feet, arms etc.). Contains benzene. May cause cancer. May cause heritable genetic damage. Gas reduces oxygen available for breathing. May cause drowsiness, dizziness, loss of consciousness and death.

OSHA regulatory status:
This preparation is classified as dangerous according to Directive 1999/45/EC and its amendments. This product is hazardous according to OSHA 29CFR 1910.1200.

Potential health effects:
Routes of exposure: Inhalation.
Eyes: Direct contact with concentrated gas may cause minor irritation. Pressurized gas can cause mechanical injury to the eye.
Skin: Not likely to cause a problem due to high volatility of the product. Contact with rapidly expanding gas may cause burns or frostbite. Human and animal studies show that benzene is absorbed through the skin. However, absorption through the skin is normally low because benzene evaporates rapidly. In most cases, any skin contact would also involve significant inhalation exposure.

Inhalation: Natural Gas contains benzene which may cause cancer and cause blood disorders and also contains n-hexane which may cause peripheral nerve damage.
Ingestion: This material is a gas under normal atmospheric conditions and ingestion is unlikely.
Chronic effects: Contains benzene. Human epidemiology studies indicate that prolonged and/or repeated overexposure to benzene may cause damage to the blood-producing system and serious blood disorders, including leukemia. Animal tests suggest that prolonged and/or repeated overexposure to benzene may damage the embryo/fetus. The relevance of these animal studies to humans has not been fully established. May cause cancer. Contains n-hexane. Prolonged and/or repeated exposures may cause damage to the peripheral nervous system (e.g. fingers, feet, arms etc.). Possible risk of impaired fertility.
Signs and symptoms: Narcosis. Decrease in motor functions.
Potential environmental effects: The product contains a substance which is very toxic to aquatic organisms.

3. Composition / Information on Ingredients

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS #</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural gas</td>
<td>8006-14-2</td>
<td>100</td>
</tr>
<tr>
<td>Contains:</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Methane</td>
<td>74-82-8</td>
<td>70-85</td>
</tr>
<tr>
<td>Carbon dioxide</td>
<td>124-38-9</td>
<td>0-21</td>
</tr>
<tr>
<td>Nitrogen</td>
<td>7727-37-9</td>
<td>0-12</td>
</tr>
<tr>
<td>Ethane</td>
<td>74-84-0</td>
<td>4-9</td>
</tr>
<tr>
<td>Propane</td>
<td>74-98-6</td>
<td>3-8</td>
</tr>
<tr>
<td>Butane</td>
<td>106-97-8</td>
<td>&lt; 3</td>
</tr>
<tr>
<td>n-Hexane</td>
<td>110-54-3</td>
<td>&lt; 2</td>
</tr>
<tr>
<td>Pentane</td>
<td>109-66-0</td>
<td>&lt; 1</td>
</tr>
<tr>
<td>Benzene</td>
<td>71-43-2</td>
<td>0-0.2</td>
</tr>
</tbody>
</table>

Composition comments: All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

4. First Aid Measures

First aid procedures:

Eye contact: In case of contact, immediately flush eyes with fresh water for at least 15 minutes while holding the eyelids open. Remove contact lenses if worn. Get medical attention if irritation persists.

Skin contact: Not expected to be absorbed through the skin but may cause slight irritation. High pressure injection through the skin requires immediate medical attention. Treat frostbite area of skin by immersing the affected area in warm water (between 100F/38C and 110F/43C, not exceeding 112F/44C). Keep immersed for 20 to 40 minutes. Seek medical assistance.

Inhalation: Immediately remove from further exposure. Get immediate medical assistance. For those providing assistance, avoid exposure to yourself or others. Use adequate respiratory protection. Give supplemental oxygen, if available. If breathing has stopped, assist ventilation with a mechanical device or use mouth-to-mouth resuscitation. Be aware that symptoms of lung edema (shortness of breath) may develop up to 24 hours after exposure.

Ingestion: This material is a gas under normal atmospheric conditions and ingestion is unlikely.

Notes to physician: Provide general supportive measures and treat symptomatically. Be aware that symptoms of lung edema (shortness of breath) may develop up to 24 hours after exposure.

General advice: Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire Fighting Measures

Flammable properties: Extremely flammable gas. Gas forms mixtures with air which can catch fire and burn with explosive violence. Vapors are heavier than air and invisible mixture spreads easily and may accumulate in low or confined areas, travel considerable distance to source of ignition and flash back. Runoff to sewer may create fire or explosion hazard.

Extinguishing media:

Suitable extinguishing media: Extinguish with carbon dioxide, dry powder or water fog.

Unsuitable extinguishing media: Not applicable.
Protection of firefighters

Protective equipment and precautions for firefighters

Do not extinguish fires unless gas flow can be stopped safely; explosive re-ignition may occur. Promptly isolate the scene by removing all persons from the vicinity of the incident. No action shall be taken involving any personal risk or without suitable training. For fires involving this material, do not enter any enclosed or confined fire space without proper protective equipment, including self-contained breathing apparatus. Stop flow of material. Use water to keep fire exposed containers cool and to protect personnel effecting shutoff. If a leak or spill has not ignited, use water spray to disperse the vapors and to protect personnel attempting to stop leak. Prevent runoff from fire control or dilution from entering streams, sewers or drinking water supply.

Special protective equipment for fire-fighters

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with full face-piece operated in positive pressure mode. Use approved gas detectors in confined spaces.

Specific methods

In the event of fire and/or explosion do not breathe fumes. Evacuate area. Check oxygen content before entering area. Water spray should be used to cool containers. Remove pressurized gas cylinders from the immediate vicinity. Turn leaking cylinder with the leak up to prevent escape of gas in liquid state. Containers can burst violently when heated, due to excess pressure build-up.

Hazardous combustion products

Normal combustion forms carbon dioxide, water vapor and may produce oxides of sulfur. Incomplete combustion can produce carbon monoxide.

6. Accidental Release Measures

Personal precautions

Eliminate all sources of ignition in vicinity of released vapors. Evacuate all non-essential personnel to an area upwind. Stop leak if possible without any risk. Ventilate enclosed areas to prevent formation of toxic, flammable or oxygen deficient atmospheres. Water spray may be used to reduce vapors. Avoid vapor cloud even with proper respiratory protective equipment. Use suitable protective equipment (section 8). Follow all fire-fighting procedures (section 5).

Environmental precautions

Prevent further leakage or spillage if safe to do so. Prevent material from entering drains, sewers or low lying areas. See section 13 for waste disposal information.

Methods for containment

Stop the flow of material, if this is without risk. Prevent entry into waterways, sewer, basements or confined areas.

Methods for cleaning up

Stop the flow of gas. Allow to dissipate with adequate ventilation.

Other information

These gases may be used as an auxiliary fuel or disposed of by burning in a properly designed flare or incinerator in accordance with federal or local requirements.

7. Handling and Storage

Handling

Put on appropriate personal protective equipment (see section 8). Special precautions should be taken when entering or handling equipment in this type of gas service because of possible radioactive contamination. All equipment should be checked for radioactivity or opened to the atmosphere and have forced ventilation applied for at least 4 hours prior to entry or handling. Avoid direct skin contact with any surface. Avoid generation of dust, smoke, fumes, etc. in the work area, or if they cannot be avoided, a tested and certified radionuclide dust respirator should be worn. Smoking, eating, or drinking should be prohibited when working with the equipment. Employees should wash thoroughly with soap and water and discard contaminated clothing after entering or handling the equipment. Workers should wash hands and face before eating, drinking and smoking. Do not breathe gas it contains benzene and n-hexane. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter enclosed areas and confined space 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. Pumping and transferring operations must be electrically grounded and bonded to dissipate static build up.

Storage

Keep away from heat, spark, and open flame. Store storage containers in cool, well-ventilated areas away from direct sunlight, heat or flame. Thoroughly test gas lines for leakage before use, especially in confined spaces. Store away from strong oxidizing materials. Vapors containing benzene may accumulate during storage or transport.

8. Exposure Controls / Personal Protection

Occupational exposure limits

<table>
<thead>
<tr>
<th>ACGIH Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benzene (71-43-2)</td>
<td>STEL</td>
<td>2.5 ppm</td>
</tr>
<tr>
<td></td>
<td>TWA</td>
<td>0.5 ppm</td>
</tr>
<tr>
<td>Butane (106-97-8)</td>
<td>TWA</td>
<td>1000 ppm</td>
</tr>
<tr>
<td>Carbon dioxide (124-38-9)</td>
<td>STEL</td>
<td>30000 ppm</td>
</tr>
<tr>
<td></td>
<td>TWA</td>
<td>5000 ppm</td>
</tr>
<tr>
<td>Ethane (74-84-0)</td>
<td>TWA</td>
<td>1000 ppm</td>
</tr>
</tbody>
</table>

Natural Gas (Sweet)
<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methane (74-82-8)</td>
<td>TWA</td>
<td>1000 ppm</td>
</tr>
<tr>
<td>Natural gas (8006-14-2)</td>
<td>TWA</td>
<td>1000 ppm</td>
</tr>
<tr>
<td>n-Hexane (110-54-3)</td>
<td>TWA</td>
<td>50 ppm</td>
</tr>
<tr>
<td>Pentane (109-66-0)</td>
<td>TWA</td>
<td>600 ppm</td>
</tr>
<tr>
<td>Propane (74-98-6)</td>
<td>TWA</td>
<td>1000 ppm</td>
</tr>
</tbody>
</table>

**U.S. - OSHA**

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benzene (71-43-2)</td>
<td>Ceiling</td>
<td>25 ppm</td>
</tr>
<tr>
<td></td>
<td>STEL</td>
<td>5 ppm</td>
</tr>
<tr>
<td></td>
<td>TWA</td>
<td>1 ppm</td>
</tr>
<tr>
<td>Butane (106-97-8)</td>
<td>TWA</td>
<td>1900 mg/m3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>800 ppm</td>
</tr>
<tr>
<td>Carbon dioxide (124-38-9)</td>
<td>PEL</td>
<td>5000 ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>9000 mg/m3</td>
</tr>
<tr>
<td>n-Hexane (110-54-3)</td>
<td>PEL</td>
<td>500 ppm</td>
</tr>
<tr>
<td></td>
<td>TWA</td>
<td>1800 mg/m3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>180 mg/m3</td>
</tr>
<tr>
<td>Pentane (109-66-0)</td>
<td>PEL</td>
<td>1000 ppm</td>
</tr>
<tr>
<td></td>
<td>STEL</td>
<td>2950 mg/m3</td>
</tr>
<tr>
<td></td>
<td>TWA</td>
<td>180 mg/m3</td>
</tr>
<tr>
<td>Propane (74-98-6)</td>
<td>PEL</td>
<td>1800 mg/m3</td>
</tr>
<tr>
<td></td>
<td>TWA</td>
<td>1000 ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1800 mg/m3</td>
</tr>
</tbody>
</table>

**Canada - Alberta**

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benzene (71-43-2)</td>
<td>STEL</td>
<td>2.5 ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>8 mg/m3</td>
</tr>
<tr>
<td></td>
<td>TWA</td>
<td>1.6 mg/m3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.5 ppm</td>
</tr>
<tr>
<td>Butane (106-97-8)</td>
<td>TWA</td>
<td>1000 ppm</td>
</tr>
<tr>
<td>Carbon dioxide (124-38-9)</td>
<td>STEL</td>
<td>54000 mg/m3</td>
</tr>
<tr>
<td></td>
<td>TWA</td>
<td>30000 ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5000 ppm</td>
</tr>
<tr>
<td>Ethane (74-84-0)</td>
<td>TWA</td>
<td>1000 ppm</td>
</tr>
<tr>
<td>n-Hexane (110-54-3)</td>
<td>TWA</td>
<td>50 ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>176 mg/m3</td>
</tr>
<tr>
<td>Pentane (109-66-0)</td>
<td>TWA</td>
<td>600 ppm</td>
</tr>
<tr>
<td>Propane (74-98-6)</td>
<td>TWA</td>
<td>1000 ppm</td>
</tr>
</tbody>
</table>

**Canada - British Columbia**

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benzene (71-43-2)</td>
<td>STEL</td>
<td>2.5 ppm</td>
</tr>
<tr>
<td></td>
<td>TWA</td>
<td>0.5 ppm</td>
</tr>
<tr>
<td>Butane (106-97-8)</td>
<td>STEL</td>
<td>750 ppm</td>
</tr>
<tr>
<td></td>
<td>TWA</td>
<td>600 ppm</td>
</tr>
<tr>
<td>Carbon dioxide (124-38-9)</td>
<td>STEL</td>
<td>15000 ppm</td>
</tr>
<tr>
<td></td>
<td>TWA</td>
<td>5000 ppm</td>
</tr>
<tr>
<td>Ethane (74-84-0)</td>
<td>TWA</td>
<td>1000 ppm</td>
</tr>
<tr>
<td>Methane (74-82-8)</td>
<td>TWA</td>
<td>1000 ppm</td>
</tr>
<tr>
<td>Natural gas (8006-14-2)</td>
<td>TWA</td>
<td>1000 ppm</td>
</tr>
<tr>
<td>n-Hexane (110-54-3)</td>
<td>TWA</td>
<td>20 ppm</td>
</tr>
<tr>
<td>Pentane (109-66-0)</td>
<td>TWA</td>
<td>600 ppm</td>
</tr>
</tbody>
</table>
Components | Type | Value
---|---|---
Propane (74-98-6) | TWA | 1000 ppm

**Additional exposure data**
OSHA: The acceptable max. peak above the ceiling concentration for an 8-hour shift is: 50 ppm. The acceptable duration of the peak above the ceiling concentration is: 10 minutes once, only if no other measureable exposure occurs.

**Engineering controls**
Explosion proof exhaust ventilation should be used. Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Provide adequate ventilation and minimize the risk of inhalation of gas.

**Personal protective equipment**
- **Eye / face protection**: If eye contact is likely, safety glasses with side shields or chemical type goggles should be worn.
- **Skin protection**: No special requirements under ordinary conditions of use.
- **Respiratory protection**: Wear approved respiratory protection when working with this material unless ventilation is adequate to keep airborne concentrations below recommended exposure standards.
- **General hygiene considerations**: Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Observe any medical surveillance requirements.

**9. Physical & Chemical Properties**
- **Appearance**: Colorless Gas
- **Color**: Colorless.
- **Odor**: Odorless.
- **Odor threshold**: Not available.
- **Physical state**: Gas.
- **Form**: Gas.
- **pH**: Not available.
- **Melting point**: Not available.
- **Freezing point**: Not available.
- **Boiling point**: -258.7 °F (-161.5 °C)
- **Flash point**: -304.6 °F (-187 °C)
- **Evaporation rate**: Not available.
- **Flammability**: Not available.
- **Flammability limits in air, upper, % by volume**: 15
- **Flammability limits in air, lower, % by volume**: 5
- **Vapor pressure**: 5.33 kPa
- **Vapor density**: 0.55
- **Specific gravity**: Not available.
- **Solubility (water)**: Insoluble.
- **Partition coefficient (n-octanol/water)**: No data available.
- **Auto-ignition temperature**: 1004 °F (540 °C)
- **Decomposition temperature**: Not available.

**10. Chemical Stability & Reactivity Information**
- **Chemical stability**: Stable at normal conditions.
- **Conditions to avoid**: Heat, flames and sparks.
- **Incompatible materials**: Strong oxidizing agents.
- **Hazardous decomposition products**: Carbon Dioxide. Carbon monoxide. Sulfur oxides.
- **Possibility of hazardous reactions**: Hazardous polymerization does not occur.
11. Toxicological Information

Toxicological data

<table>
<thead>
<tr>
<th>Components</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Butane (106-97-8)</td>
<td>Acute Inhalation LC50 Rat: 658 mg/l 4 Hours</td>
</tr>
<tr>
<td>Pentane (109-66-0)</td>
<td>Acute Inhalation LC50 Rat: 364 mg/l 4 Hours</td>
</tr>
<tr>
<td>Benzene (71-43-2)</td>
<td>Acute Inhalation LC50 Mouse: 9980 mg/l</td>
</tr>
<tr>
<td></td>
<td>Acute Inhalation LC50 Rat: 10000 mg/l 7 Hours</td>
</tr>
<tr>
<td></td>
<td>Acute Oral LD50 Mouse: 4700 mg/kg</td>
</tr>
<tr>
<td></td>
<td>Acute Oral LD50 Rat: 3306 mg/kg</td>
</tr>
<tr>
<td></td>
<td>Acute Other LD50 Mouse: 340 mg/kg</td>
</tr>
<tr>
<td></td>
<td>Acute Other LD50 Mouse: 0.000001 ml/kg</td>
</tr>
<tr>
<td></td>
<td>Acute Other LD50 Rat: 2.89 mg/kg</td>
</tr>
<tr>
<td>Propane (74-98-6)</td>
<td>Acute Inhalation LC50 Rat: &gt; 1442.847 mg/l 15 Minutes</td>
</tr>
</tbody>
</table>

Toxicological information

This product may contain detectable but varying quantities of the naturally occurring radioactive substance radon 222. The amount in the gas itself is not hazardous, but since radon rapidly decays ($t_{1/2} = 3.82$ days) to form other radioactive elements including lead 210, polonium 210, and bismuth 210, equipment may be radioactive. The radon daughters are solids and therefore may attach to dust particles or form films and sludges in equipment. Inhalation, ingestion or skin contact with radon daughters can lead to the deposition of radioactive material in the lungs, bone, blood forming organs, intestinal tract, kidney and colon. Occupational exposure to radon and radon daughters has been associated with an increased risk of lung cancer in underground uranium miners. Follow the special precautions listed in handling and storage section of this document (see section 7).

Acute effects

Contact with liquefied gas can cause damage (frostbite) due to rapid evaporative cooling.

Local effects

May cause central nervous system effects.

Sensitization

Not a skin sensitizer.

Chronic effects

Contains benzene. Human epidemiology studies indicate that prolonged and/or repeated overexposure to benzene may cause damage to the blood-producing system and serious blood disorders, including leukemia. Animal tests suggest that prolonged and/or repeated overexposure to benzene may damage the embryo/fetus. The relevance of these animal studies to humans has not been fully established. Contains n-hexane. Prolonged and/or repeated exposures may cause damage to the peripheral nervous system (e.g. fingers, feet, arms etc.).

Carcinogenicity

May also contain benzene, a known human carcinogen, which may cause leukemia.

ACGIH Carcinogens

Benzene (CAS 71-43-2) A1 Confirmed human carcinogen.

IARC Monographs. Overall Evaluation of Carcinogenicity

Benzene (CAS 71-43-2) 1 Carcinogenic to humans.

US NTP Report on Carcinogens: Known carcinogen

Benzene (CAS 71-43-2) Known carcinogen.

US OSHA Specifically Regulated Substances: Cancer hazard

Benzene (CAS 71-43-2) Cancer hazard.

Mutagenicity

May cause heritable genetic damage.

Neurological effects

Central and/or peripheral nervous system damage.

Reproductive effects

Possible risk of impaired fertility.

Teratogenicity

No data available.

12. Ecological Information

Ecotoxicological data

<table>
<thead>
<tr>
<th>Components</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pentane (109-66-0)</td>
<td>EC50 Daphnia: 2.3 mg/l 48 Hours</td>
</tr>
<tr>
<td></td>
<td>LC50 Fish: 3.1 mg/l 96 Hours</td>
</tr>
<tr>
<td>n-Hexane (110-54-3)</td>
<td>LC50 Fathead minnow (Pimephales promelas): 2.101 - 2.981 mg/l 96 hours</td>
</tr>
<tr>
<td>Benzene (71-43-2)</td>
<td>EC50 Water flea (Daphnia magna): 8.76 - 15.6 mg/l 48 hours</td>
</tr>
<tr>
<td></td>
<td>EC50 Water flea (Daphnia magna): 8.76 - 15.6 mg/l 48 Hours</td>
</tr>
</tbody>
</table>
**Components Test Results**

**LC50 Rainbow trout, donaldson trout (Oncorhynchus mykiss):** 5 mg/l 96 Hours

### Ecotoxicity
The product contains a substance which is very toxic to aquatic organisms. The product is a volatile organic compound which has a photochemical ozone creation potential.

### Persistence and degradability
No data available.

### Bioaccumulation / Accumulation
No data available.

### Partition coefficient (n-octanol/water)
No data available.

### Mobility in environmental media
The product is a volatile substance, which may spread in the atmosphere.

### 13. Disposal Considerations

**Waste codes**
D001: Waste Flammable material with a flash point <140 °F

**Disposal instructions**
This material and its container must be disposed of as hazardous waste. Do not dispose of waste into sewer. This product, in its present state, when discarded or disposed of, is not a hazardous waste according to Federal regulations (40 CFR 261.4 (b)(4)). Under RCRA, it is the responsibility of the user of the product to determine, at the time of disposal, whether the product meets RCRA criteria for hazardous waste.

### 14. Transport Information

#### DOT

**Basic shipping requirements:**
- **UN number**: UN1971
- **Proper shipping name**: Natural gas, compressed
- **Hazard class**: 2.1
- **Subsidiary hazard class**: 6.1
- **Labels required**: 2.1

**Additional information:**
- **Packaging exceptions**: 306
- **Packaging non bulk**: 302
- **Packaging bulk**: 302
- **ERG number**: 115

#### IATA

**Basic shipping requirements:**
- **UN number**: 1971
- **Proper shipping name**: Natural gas, compressed
- **Hazard class**: 2.1
- **Subsidiary hazard class**: 6.1

#### IMDG

**Basic shipping requirements:**
- **UN number**: 1971
- **Proper shipping name**: Natural gas, compressed
- **Hazard class**: 2.1
- **Subsidiary hazard class**: 6.1
- **EmS No.**: F-D, S-U

#### TDG

**Basic shipping requirements:**
- **Proper shipping name**: Natural gas, compressed
- **Hazard class**: 2.1
- **Subsidiary hazard class**: 6.1
- **UN number**: UN1971
15. Regulatory Information

**US federal regulations**

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

All components are on the U.S. EPA TSCA Inventory List.

**US EPCRA (SARA Title III) Section 313 - Toxic Chemical: De minimis concentration**

- Benzene (CAS 71-43-2) 0.1%
- n-Hexane (CAS 110-54-3) 1.0%

**US EPCRA (SARA Title III) Section 313 - Toxic Chemical: Listed substance**

- Benzene (CAS 71-43-2) Listed.
- n-Hexane (CAS 110-54-3) Listed.

**US TSCA Section 12(b) Export Notification: Export Notification requirement/De minimis concentration**

- Pentane (CAS 109-66-0) 1.0 % One-Time Export Notification only.

**CERCLA (Superfund) reportable quantity (lbs)**

- Natural gas 100
- Methane 100
- Ethane 100
- Propane 100
- Butane 100
- n-Hexane 100
- Pentane 100
- Benzene 10

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

**Hazard categories**

- Immediate Hazard - Yes
- Delayed Hazard - Yes
- Fire Hazard - Yes
- Pressure Hazard - No
- Reactivity Hazard - No

**Section 302 extremely hazardous substance**

No

**Section 311 hazardous chemical**

No

**Drug Enforcement Agency (DEA)**

Not controlled

**Canadian regulations**

This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

**WHMIS status**

Controlled

**WHMIS classification**

A - Compressed Gas
B1 - Flammable/Combustible
WHMIS labeling

State regulations

This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

US - California Hazardous Substances (Director's): Listed substance
- Benzene (CAS 71-43-2) Listed.
- Butane (CAS 106-97-8) Listed.
- Carbon dioxide (CAS 124-38-9) Listed.
- n-Hexane (CAS 110-54-3) Listed.
- Pentane (CAS 109-66-0) Listed.

US - Massachusetts RTK - Substance: Listed substance
- Benzene (CAS 71-43-2) Listed.
- Carbon dioxide (CAS 124-38-9) Listed.
- Methane (CAS 74-82-8) Listed.
- Natural gas (CAS 8006-14-2) Listed.
- n-Hexane (CAS 110-54-3) Listed.
- Nitrogen (CAS 7727-37-9) Listed.
- Pentane (CAS 109-66-0) Listed.
- Propane (CAS 74-98-6) Listed.

US - New Jersey Community RTK (EHS Survey): Reportable threshold
- Benzene (CAS 71-43-2) 500 LBS
- Butane (CAS 106-97-8) 500 LBS
- Ethane (CAS 74-84-0) 500 LBS
- Methane (CAS 74-82-8) 500 LBS
- n-Hexane (CAS 110-54-3) 500 LBS
- Pentane (CAS 109-66-0) 500 LBS
- Propane (CAS 74-98-6) 500 LBS

US - New Jersey RTK - Substances: Listed substance
- Benzene (CAS 71-43-2) Listed.
- Carbon dioxide (CAS 124-38-9) Listed.
- Methane (CAS 74-82-8) Listed.
- Natural gas (CAS 8006-14-2) Listed.
- Nitrogen (CAS 7727-37-9) Listed.
- Propane (CAS 74-98-6) Listed.

US - Pennsylvania RTK - Hazardous Substances: Listed substance
- Benzene (CAS 71-43-2) Listed.
- Carbon dioxide (CAS 124-38-9) Listed.
- Methane (CAS 74-82-8) Listed.
- Natural gas (CAS 8006-14-2) Listed.
- n-Hexane (CAS 110-54-3) Listed.
- Nitrogen (CAS 7727-37-9) Listed.
- Pentane (CAS 109-66-0) Listed.
- Propane (CAS 74-98-6) Listed.

US - Pennsylvania RTK - Hazardous Substances: Special hazard
- Benzene (CAS 71-43-2) Special hazard.

16. Other Information

Further information
HMIS® is a registered trade and service mark of the NPCA.

HMIS® ratings
- Health: 1*
- Flammability: 4
- Physical hazard: 0

NFPA ratings
- Health: 1
- Flammability: 4
- Instability: 0

Disclaimer
This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment.

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