

# SAFETY DATA SHEET

**Natural Gas (CNG)** 

Page: 1 of 6 Printed: 04/12/2015 Revision: 04/12/2015

1. PRODUCT AND COMPANY IDENTIFICATION

**Product Code:** 00015

**Product Name:** Natural Gas (CNG)

Gas Innovations **Company Name: Phone Number:** 

18005 E. Hwy 225 +1 (281)471-2200

La Porte, TX 77571

Web site address: www.gasinnovations.com

3E (within United States) **Emergency Contact:** +1 (866)303-2640 Information: Infotrac (outside of United States) +1 (352)323-3500

UN1971 Natural Gas, Compressed. Synonyms:

## 2. HAZARDS IDENTIFICATION

Gas Under Pressure, Compressed gas Flammable Gases, Category 1





**GHS Signal Word:** Danger

**GHS Hazard Phrases:** H220 - Extremely flammable gas.

H280 - Containers gas under pressure; may explode if heated.

P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking. **GHS Precaution Phrases:** P377 - Leaking gas fire: Do not extinguish, unless leak can be stopped safely. **GHS Response Phrases:** 

P381 - Eliminate all ignition sources if safe to do so.

**GHS Storage and Disposal** 

Phrases:

P410+403 - Protect from sunlight and store in well-ventilated place.

**Hazard Rating System:** 



**Potential Health Effects** (Acute and Chronic):

Inhalation: May be harmful if inhaled. May cause respiratory tract irritation. This material can act as

a simple asphyxiant by displacement of air.

May cause skin irritation. **Skin Contact: Eye Contact:** May cause eye irritation. Ingestion: Not a likely route of exposure.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

**Hazardous Components (Chemical Name)** CAS# Concentration

74-82-8 Methane >94.0 % 74-84-0 ~3.10 % Ethane



# SAFETY DATA SHEET Natural Gas (CNG)

Natural Gas (CNG)

Page: 2 of 6 Printed: 04/12/2015 Revision: 04/12/2015

## 4. FIRST AID MEASURES

**Emergency and First Aid** 

**Procedures:** 

**In Case of Inhalation:** If breathed in, move person into fresh air. If not breathing give artificial respiration.

Mouth-to-mouth resuscitation should be used immediately for a victim of methane

asphyxiation. Get immediate medical advice/attention.

In Case of Skin Contact: Wash off with soap and plenty of water. If skin irritation occurs, get medical

advice/attention.

**In Case of Eye Contact:** Flush eyes with water as a precaution.

In Case of Ingestion: Not a likely route of exposure. Rinse mouth with water. Do NOT induce vomiting. Never

give anything by mouth to an unconscious person. Consult a physician.

Note to Physician: Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of

dangerous area.

## 5. FIRE FIGHTING MEASURES

Flash Pt: -306 F (-188 C) Method Used: Unknown Explosive Limits: LEL: 5% (V) UEL: 15% (V)

**Autoignition Pt:** 900 F (482 C)

Suitable Extinguishing Media: Stop the flow of gas. Dry chemical or CO2. For large fires use water spray, water fog, or

appropriate foam.

Fire Fighting Instructions: Personnel may have to wear approach-type protective suits and positive pressure

self-contained breathing apparatus. Firefighters' turnout gear may be inadequate. Cylinders exposed to fire may rupture with violent force. Extinguishing surrounding fire and keep cylinders cool by applying water from a maximum possible distance with a water spray. Flammable gases may spread from a spill after the fire is extinguished and be subject to re-ignition. A hazard from reignition exists if flame is extinguished without stopping the flow of gas and/or cooling (with water) the surrounding and eliminating

ignition sources.

Flammable Properties and

Hazards:

Fire conditions can result in the formation of carbon monoxide and carbon dioxide.

### 6. ACCIDENTAL RELEASE MEASURES

Environmental Precautions: Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

Steps To Be Taken In Case Material Is Released Or Spilled: Natural gas is lighter than air and freely dissipates. Evacuate personnel to safe areas. Ensure adequate ventilation. Remove all sources of ignition. Stop leak if you can do it without risk. Prepare for possible ignition. Avoid breathing vapors, mist or gas. Ventilate enclosed areas to reduce explosion hazard. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.

# 7. HANDLING AND STORAGE

Precautions To Be Taken in

Handling:

Natural gas is contained in piping and equipment designed to withstand elevated pressures. Use explosion-proof, Class I Group D electrical equipment. Take measures to prevent the build up of electrostatic charge. Keep away from heat and sources of ignition. Keep away from oxidizing agents.

NO SMOKING IN AREAS OF USE.

Precautions To Be Taken in

Storing:

Keep container tightly closed in a dry and well-ventilated place. Store in cool place. Contents under pressure. Keep away from heat and sources of ignition. Keep away from

oxidizing agents.



# SAFETY DATA SHEET **Natural Gas (CNG)**

Page: 3 of 6 Printed: 04/12/2015 Revision: 04/12/2015

NO SMOKING IN AREAS OF USE.

Other Precautions: Handle in accordance with good industrial hygiene and safety practices. Keep out of

reach of children.

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

CAS# **Partial Chemical Name OSHA TWA Other Limits ACGIH TWA** 

No data. 74-82-8 Methane TLV: Simple asphyxiant ppm No data. No data. TLV: Simple asphyxiant ppm No data. 74-84-0 Ethane

Respiratory Equipment

(Specify Type):

In immediately dangerous to life or health (IDLE) atmospheres, in enclosed areas, or immediately adjacent to blowing natural gas, self-contained breathing apparatus or

supplied air with escape bottled is needed.

Face shield and safety glasses. **Eye Protection:** 

For prolonged or repeated contact use protective gloves. **Protective Gloves:** 

Choose body protection according to the amount and concentration of the dangerous Other Protective Clothing:

substance at the work place.

**Engineering Controls** 

(Ventilation etc.):

Gas displaces the air and causes a deficiency of oxygen and the possibility of

asphyxiation. Use explosion-proof ventilation equipment. Use oxygen monitors to ensure

adequate oxygen levels and combustible gas indicators to check for explosive

atmosphere.

Work/Hygienic/Maintenance

**Practices:** 

Freezing Point:

Handle in accordance with good industrial hygiene and safety practice. Wash hands

before breaks and at the end of workday.

# 9. PHYSICAL AND CHEMICAL PROPERTIES

**Physical States:** [ X ] Gas [ ] Liquid [ ] Solid

Appearance: colorless. Appearance and Odor:

Odor: Odorless. Gas. Mercaptan-like odor.

Tasteless. Lighter than air.

-296 F (-182 C)

**Boiling Point:** -259 F (-162 C)

900 F (482 C) **Autoignition Pt:** 

Flash Pt: -306 F (-188 C) Method Used: Unknown LEL: 5% (V) UEL: 15% (V) **Explosive Limits:** 

NA Specific Gravity (Water = 1): Density:

Vapor Pressure (vs. Air or

mm Hg):

760 MM\_HG at -161 C (-258 F)

0.6 Vapor Density (vs. Air = 1): NA **Evaporation Rate:** 

Insoluble Solubility in Water:

NA Saturated Vapor

Concentration:

108.7 uP at 20.0 C (68.0 F) Viscosity:

NA pH:

**Percent Volatile:** 100 % by volume.



# SAFETY DATA SHEET

**Natural Gas (CNG)** 

Page: 4 of 6 Printed: 04/12/2015

Revision: 04/12/2015

## 10. STABILITY AND REACTIVITY

Fire conditions can result in the formation of carbon monoxide and carbon dioxide. Reactivity:

Stability: Unstable [ ] Stable [X]

Heat, flames and sparks. Stable under recommended storage conditions. **Conditions To Avoid -**

Instability:

Incompatibility - Materials To Strong oxidizing agents.

Avoid:

Hazardous Decomposition Or Fire conditions can result in the formation of carbon monoxide and carbon dioxide.

**Byproducts:** 

**Possibility of Hazardous** Will not occur [X] Will occur [ ]

Reactions:

No data available. **Conditions To Avoid -**

**Hazardous Reactions:** 

# 11. TOXICOLOGICAL INFORMATION

Epidemiology: No information available. **Toxicological Information:** 

> Teratogenicity: No information available. Reproductive Effects: No information available.

Mutagenicity: No information available. Neurotoxicity: No information available.

Irritation or Corrosion: No data available. No data available. Sensitization:

Carcinogenicity: NTP? No IARC Monographs? No OSHA Regulated? No

### 12. ECOLOGICAL INFORMATION

General Ecological

Product is non-toxic and will dissipate in air if ignition does not occur.

Information:

Results of PBT and vPvB

assessment:

No data available.

Persistence and

No data available.

Degradability:

**Bioaccumulative Potential:** No data available. No data available. Mobility in Soil:

### 13. DISPOSAL CONSIDERATIONS

**Waste Disposal Method:** Product is non-toxic and will dissipate in air if ignition does not occur. Do not attempt to

> dispose of residual or unused quantities. Return container to supplier. Dispose of contents/containers in accordance with local/regional/national/international regulations.

### 14. TRANSPORT INFORMATION

#### LAND TRANSPORT (US DOT):

DOT Proper Shipping Name: Methane, compressed.

**DOT Hazard Class:** 2.1 FLAMMABLE GAS

UN1971 **UN/NA Number:** 





# SAFETY DATA SHEET **Natural Gas (CNG)**

Page: 5 of 6

Printed: 04/12/2015 Revision: 04/12/2015

## 15. REGULATORY INFORMATION

EPA SARA (Superfund Amendments and Reauthorization Act of 1986) Lists

**Hazardous Components (Chemical Name)** S. 302 (EHS) S. 304 RQ S. 313 (TRI)

74-82-8 Methane No No No 74-84-0 Ethane No No No

CAS# **Hazardous Components (Chemical Name)** Other US EPA or State Lists

74-82-8 TSCA: Yes - Inventory; CA PROP.65: No; CA TAC, Title 8: Methane

> No; MA Oil/HazMat: Yes; MI CMR, Part 5: No; NC TAP: No; NJ EHS: Yes - 1202; NY Part 597: No; PA HSL: Yes - 1; SC

TAP: No; WI Air: No

Ethane TSCA: Yes - Inventory; CA PROP.65: No; CA TAC, Title 8: 74-84-0

No; MA Oil/HazMat: Yes; MI CMR, Part 5: No; NC TAP: No; NJ EHS: Yes - 0834; NY Part 597: No; PA HSL: Yes - 1; SC

TAP: No; WI Air: No

CAS# **Hazardous Components (Chemical Name) International Regulatory Lists** 

74-82-8 Methane Canadian DSL: Yes; Canadian NDSL: No; Mexico INSQ: Yes -

> 1971; Australia ICS: Yes; New Zealand IOC: Yes; China IECSC: Yes; Japan ENCS: Yes - (2)-1; Korea ECL: Yes -KE-23181; Philippines ICCS: Yes; REACH: Yes - (R), (P)

Canadian DSL: Yes; Canadian NDSL: No; Mexico INSQ: Yes -74-84-0 Ethane

> 1035; Australia ICS: Yes; New Zealand IOC: Yes; China IECSC: Yes; Japan ENCS: Yes - (2)-2; Korea ECL: Yes -KE-13138; Philippines ICCS: Yes; REACH: Yes - (R), (P)

### **16. OTHER INFORMATION**

04/12/2015 **Revision Date:** 

Additional Information About No data available.

This Product:

**Company Policy or** 

Disclaimer:

The information, recommendations, and suggestions herein were compiled from reference material and other sources believed to be reliable. However, the SDS's accuracy or completeness is not guaranteed by Gas Innovations or its affiliates, nor is any responsibility assumed or implied for any loss or damage resulting from inaccuracies or omissions. Since conditions of use are beyond our control, no warranties of merchantability of fitness for a particular purpose are expressed or implied. This SDS is not intended as a license to operate under, or a recommendation to infringe on, any patents. Appropriate warnings and safe handling procedures should be provided to handlers and users.