



Safety Data Sheet

1. Identification

Product Name: Natural Gas (Sweet)
Chemical Family: Natural Gas
Manufacturers Name: Whiting Oil and Gas Corporation
Address: 1700 Broadway, Suite 2300
Denver, Colorado 80290
Product Use: Hydrocarbon fuel
Phone Number for Information: (303) 837-1661
Emergency Phone Number: (800) 424-9300 (Chemtrec)

Natural gas is a raw natural gas, as found in nature, or a gaseous combination of hydrocarbons having carbon numbers predominantly in the range of C1 through C4 separated from raw natural gas by the removal of natural gas condensate and natural gas liquids.

2. Hazard Identification

Natural gas is a colorless gas under pressure having no odor to a slight hydrocarbon odor. It is extremely flammable and explosive. Keep away from heat, sparks, and open flame. At high concentrations this product acts as a simple asphyxiant, which can displace oxygen in the lungs.

Large pressure drops in a natural gas process could result in temperatures low enough to cause frost bite.

DANGER!
EXTREMELY FLAMMABLE

GAS UNDER PRESSURE. MAY EXPLODE IF HEATED. MAY BECOME ASPHYXIANANT IF RELEASED OR IN CONFINED SPACES.

NO SMOKING!
KEEP AWAY FROM HEAT/SPARKS/OPEN FLAMES/HOT SURFACES. WEAR PROTECTIVE GLOVES, CLOTHING AND EYE WEAR WHEN HANDLING.

Globally Harmonized System (GHS) Information

Physical Hazards Classification

Flammable Gas, Category 1
Gas Under Pressure, Liquefied gas

Health Hazards Classification

None

Environmental Hazards Classification

None

GHS Label Information



Symbols:

Signal Word: Danger

Hazard Statements:

Physical Hazards

Extremely flammable gas
Contains gas under pressure, may explode if heated

Health Hazards

Simple asphyxiant

Environmental Hazards

None

Precautionary Statements:

Prevention

Keep away from heat/sparks/open flames/hot surfaces
Do not eat, drink or smoke when using this product
Use only outdoors or in a well-ventilated area
Wear cold insulating gloves/protective clothing/face protection
Wear respiratory protection

Response

Leaking gas fire: Do not extinguish, unless leak can be stopped safely.
Eliminate ignition sources if safe to do so
Thaw frostbitten body parts with lukewarm water. Do not rub affected area

Storage

Store locked up
Protect from sunlight. Store in a well-ventilated place

Disposal

Dispose of contents/container in accordance with local/regional/national/international regulations

3. Composition/Information on Ingredients

<u>COMPOSITION</u>	<u>CAS NUMBER</u>	<u>PERCENT</u>
Natural Gas	8006-14-2	See approximate values below
Methane	8002-05-9	60-75%
Ethane		8-20%
Nitrogen	7727-37-9	2-9%
Carbon Dioxide	124-38-9	0-2%
Hydrogen Sulfide	7783-06-4	>0.001%
Hydrocarbons	--	---

4. First Aid Measures

Eye Contact

Not applicable

Skin Contact

In the event of frostbite, gently warm the effected area – do not rub. Seek medical attention.

Inhalation

Remove victim to fresh air and provide oxygen if breathing labored, shallow, or difficult. Rescuer must wear appropriate supplied air respirator to remove worker from contaminated area to fresh air. Give artificial respiration if victim is not breathing. Seek medical attention immediately.

Ingestion

Not applicable

5. Fire-Fighting Measures

Extinguishing Media

For small fires, class B fire extinguishing media such as carbon dioxide or dry chemical can be used. Water spray, fog, and/or foam are recommended for larger fires.

Special Fire Fighting Procedures and Precautions

Stop flow of gas before extinguishing fire as explosive reignition can occur. Use water to cool containers and exposed area. Stay upwind and out of low areas.

Unusual Fire Explosion Hazards

None

NFPA Ratings

Health – 1

Flammability – 4

Reactivity – 0

Other – 0

Key: Least-0; Slight-1; Moderate-2; High-3; Extreme-4

6. Accidental Release Measures

Keep the public away. Isolate and evacuate the area. Stop leak if safe to do so and eliminate all ignition sources. Allow gas to dissipate and ventilate low lying or closed areas to reduce the danger of explosion. Wear appropriate respirator and protective clothing.

7. Handling and Storage

Comply with all regulatory requirements. Store in suitable tanks or closed, labeled containers in a cool, well-ventilated area.

Keep away from heat, sparks or flame. Extinguish pilot lights, cigarettes and turn off other sources of ignition prior to use and until all gas is gone. Containers, even those that have been emptied, can contain explosive vapors. Do not puncture, cut, drill, grind, weld or perform similar operations on or near containers.

8. Exposure Controls/Personal Protection

Occupational Exposure Limits

<u>COMPONENT</u>	<u>OSHA PEL</u>	<u>ACGIH TLV TWA</u>
Natural Gas	Not available	Not available
Methane	Not available	1000 ppm*
Ethane	Not available	1000 ppm*
Nitrogen	Not available	simple asphyxiant
Carbon Dioxide	5000 ppm	5000 ppm/STEL 30000 ppm

Notes:

* Aliphatic Hydrocarbon Gas (Alkane C1-C4)

Engineering Controls

Maintain air concentrations below flammable limits and occupational exposure standards for chemical components by using ventilation and other engineering controls.

Personal Protective Equipment

Eye/Face Protection

Goggles or safety glasses should be used when handling compressed gasses.

Skin Protection

Wear insulated gloves to protect from frostbite if appropriate. Flame resistant clothing is required where potential for flash fire exist.

Respiratory Protection

NIOSH approved self-contained breathing apparatus (SCBA) with a full face-piece operated in a positive pressure mode are required when entering oxygen deficient atmospheres.

9. Physical and Chemical Properties

Appearance and Odor: Colorless gas with no odor or a slight hydrocarbon odor.

pH: not applicable

Melting Point/freezing point: not applicable

Boiling Point: -259°F (methane)

Flash Point and Method: -306°F (methane) / closed cup

Evaporation Rate: not applicable

Flammable Limits: (approximate % Volume in air) Lower: 5.0 Upper: 15.0 (methane)

Vapor Pressure: not applicable

Specific Gravity: not available

Vapor Density <1 (Air=1)

Solubility: not applicable

Partition coefficient (n-octanol/water): not applicable

Auto ignition temperature >500 °F

Decomposition temperature not available

Viscosity not applicable

10. Stability and Reactivity

Stability: Stable

Hazardous polymerization: Will not occur

Conditions and Materials to Avoid: Avoid heat, sparks, flame and contact with strong oxidizing agents such as nitrates, perchlorates, chlorine, and fluorine.

Hazardous Decomposition Products: Thermal decomposition products are highly dependent on the combustion conditions. Carbon monoxide and other unidentified organic compounds may be formed upon combustion.

11. Toxicological Information

Acute toxicity - Natural gas is an anesthetic at high concentrations, producing dizziness, headache, incoordination and narcosis; extremely high concentrations can cause asphyxiation and death by displacement of oxygen in the lungs. Natural gas is a simple asphyxiant.

Skin corrosion/irritation - Generally not a skin irritant.

Eye damage/irritation - Generally not an eye irritant. Pressurized gas can cause mechanical injuries to the eye.

Sensitization - Not known to cause respiratory or skin sensitization

Germ cell mutagenicity – Information not available

Carcinogenicity – Not suspected of causing cancer.

Reproductive toxicity – Not a known reproductive toxin

Specific Target Organs/Systemic Toxicity – Not applicable

Aspiration hazard – Not applicable

12. Ecological Information

None identified – Natural gas will dissipate in air.

13. Disposal Considerations

This product, as produced, is not specifically listed as an EPA RCRA hazardous waste according to 40 CFR 261. However, when disposed of, it may meet the criteria of a “characteristic” hazardous waste. It is the responsibility of the user to determine if the material is considered hazardous for disposal under federal, state and local regulations.

14. Transportation Information

Department of Transportation Classification: Flammable Gas

D.O.T. proper shipping name: Natural Gas, Compressed

Other Requirements: UN 1971

Hazard Class: 2.1

Packing Group not applicable

15. Regulatory Information

TSCA This product is listed on the TSCA chemical inventory.

SARA Section 302 This product does not contain constituents listed on the EPA's extremely hazardous substance list.

SARA Section 304 This product contains the following component(s) which in the event of a spill may be subject to SARA reporting requirements: none

SARA Section 311/312 The following hazard categories apply to this product:

Acute health hazard

Fire hazard

Sudden release of pressure

SARA Section 313 This product does not contain any components which may be subject to reporting on a toxic release inventory.

16. Other Information

Date Prepared: August 29, 2008

Revised: October 30, 2013

Last Reviewed: October 30, 2013

Disclaimer:

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