



**MSDS  
MATERIAL SAFETY DATA SHEET**

**Natural Gas  
MSDS # 101**

Effective May 11, 2010

**Manufacturer/Supplier:**

Hunt Oil Company  
1900 North Akard Street  
Dallas, Texas 75201-2300  
214-978-8000

**Emergency Health Information:**

**CHEMTREC** (for transport emergencies):

(713) 420-2600

800-424-9300  
(USA)

202-483-7616  
(Outside the USA)

**Common Name(s)**

Well Head Gas

**Formula**

C<sub>1</sub>-C<sub>8</sub>

**Important Components:**

Component	CAS #	Range % by Wt.
Aliphatic Hydrocarbon		100
Benzene	71-43-2	>0.1
Hydrogen sulfide	7783-06-4	>20 ppm

ACGIH TLV-TWA: 800 ppm  
ACGIH TLV-TWA: 10 ppm  
ACGIH TLV-TWA: 10 ppm  
ACGIH TLV-STEL: 15 ppm

**Warning Statement:**

Flammable liquid. Can cause skin irritation on prolonged or repeated contact. Vapor Harmful. May give off sulfur-containing gases. Cancer hazard. Harmful or fatal if liquid aspirated into lungs.

**NFPA Codes: (Health;2) (Flammability;4) (Reactivity;0), Chronic Hazard**

**Appearance and odor:**

Clear, colorless, may have distillate odor or sulphur odor.

**HEALTH HAZARD INFORMATION**

**EYE**

Effect: No significant health hazards identified.  
First Aid: Flush eyes with plenty of water.  
Protection: None required; however, use of eye protection is good industrial practice.

**SKIN**

Effect: Causes skin irritation on prolonged or repeated contact. Possible cancer hazard based on skin painting studies in laboratory animals. See toxicology section.  
First Aid: Wash exposed skin with soap and water. Remove contaminated clothing including shoes, thoroughly clean and dry before reuse. Get prompt medical attention if irritation develops.  
Protection: Avoid skin contact. Wear protective clothing and gloves. Wash thoroughly after handling.

**INHALATION**

Effect: Can be harmful or fatal if vapors are inhaled. Can cause blood disorders. See Toxicology Section.  
First Aid: If worker is overcome, rescuer must wear supplied air breathing apparatus to remove worker to uncontaminated area. Give artificial respiration if not breathing. Get immediate medical attention.  
Protection: If ventilation is inadequate, use NIOSH/MSHA certified respirator.

**INGESTION**

Effect: Harmful or fatal if aspirated into lungs. See Toxicology section.  
First Aid: If swallowed, **DO NOT** induce vomiting. Get immediate medical attention.

## FIRE AND EXPLOSION INFORMATION

Flashpoint:	-306oF to -211oF LEL 3.8-6.5% UEL 13-17%
Extinguishing Media:	Dry chemical, CO <sub>2</sub> , water spray (fog) for dispersing vapor
Unusual Fire and Explosion Hazards:	Natural Gas presents an extreme fire hazard. Gas forms mixture with air which can explode violently on contact with any source of ignition.
Precautions:	Do not extinguish unless gas source is shut off. Approach from upwind, water spray (fog) may be used to disperse vapors. Breathing protection may be required if there is a hydrogen sulfide exposure.
Fire-fighting Equipment:	Firefighters should wear full bunker gear, including a positive pressure self-contained breathing apparatus.

## REACTIVITY INFORMATION

Stability:	Stable
Conditions to Avoid:	Ignition sources (e.g. heat, sparks and open flames). Avoid unventilated, enclosed areas.
Materials to Avoid:	Avoid chlorine, fluorine and other strong oxidizers.
Hazardous Decomposition:	CO, CO <sub>2</sub> , and possibly SO <sub>2</sub>

## CHEMICAL AND PHYSICAL PROPERTIES

Solubility in Water:	Negligible
Vapor Pressure	5000 PSI @ 100oF
Specific Gravity (Water = 1):	gas
Vapor Density:	55-75 @ 60oF

## STORAGE AND ENVIRONMENTAL PROTECTION

Handling:	Keep away from ignition sources, e.g., heat, sparks or open flames. Do not breathe vapors. Do not get on skin or clothing. Ground and bound containers when transferring materials. Use with adequate ventilation.
Spills and Leaks:	Remove or shut off all sources of ignition. Contain and remove by mechanical means. Keep out of sewers and waterways. Use appropriate protective equipment.
Disposal:	Enclosed-controlled incineration is recommended unless directed otherwise by applicable ordinances.
Special Precautions:	Avoid strong oxidizers.

## TOXICOLOGICAL INFORMATION

From skin-painting studies in laboratory animals, it has been concluded that most, if not all, natural gas, regardless of source, possess carcinogenic activity to some degree. This means that workers who practice poor personal hygiene and who are repeatedly exposed by direct skin contact to natural gas over many years may potentially be at risk of developing skin cancer. However, intermittent or occasional with petroleum crude oils is not expected to have serious health effects as long as good personal hygiene measures such as those outlined in this material safety data sheet are followed.

Aspiration of this product into the lungs can cause chemical pneumonia and can be fatal. Aspiration into the lungs can occur while vomiting after ingestion of this product. Do not siphon by mouth.

Acute toxicity of benzene results primarily from depression of the central nervous system (CNS). Inhalation of concentrations over 50 ppm can produce headache, lassitude, weariness, dizziness, drowsiness, or excitation. Exposure to very high levels can result in unconsciousness and death.

Long term overexposure to benzene has been associated with certain types of leukemia in humans. In addition, the International Agency for Research on Cancer (IARC) and OSHA consider benzene to be a human carcinogen. Chronic exposures to benzene at levels of 100 ppm and below have been reported to cause adverse blood effects including anemia. Benzene exposure can occur by inhalation and absorption through the skin.

Inhalation and forced feeding studies of benzene in laboratory animals have produced a carcinogenic response in a variety of organs, including possibly leukemia, other adverse effects on the blood, chromosomal changes and some effects on the immune system. Exposure to benzene at levels up to 300 ppm did not produce birth defects in animal studies; however, exposure to the higher dosage levels (greater than 100 ppm) resulted in a reduction of body weight of the rat pups (fetotoxicity). Changes in the testes have been observed in mice exposed to benzene at 300 ppm, but reproductive performance was not altered in rats exposed to benzene at the same level.

## TRANSPORTATION INFORMATION

Proper Shipping Name:	Methane, Compressed
Subsidiary Class:	2.1
UN Number:	UN1971
DOT Shipping Label	FLAMMABLE GAS (red)

## REGULATORY INFORMATION

U.S. Federal, State, and Local Regulatory Information	Any spill or uncontrolled release of this product, including any substantial threat of release, may be subject to federal, state and/or local reporting requirements. This product and/or its constituents may also be subject to other regulations at the state and/or local level. Consult those regulations applicable to your facility/operation.
Clean Water Act (oil spills)	Any spill or release of this product to "navigable waters" (essentially any surface water, including certain wetlands) or adjoining shorelines sufficient to cause a visible sheen or deposit of a sludge or emulsion must be reported immediately to the National Response Center (1-800-424-8802) as required by U.S. Federal Law. Also contact appropriate state and local regulatory agencies as required.
CERCLA Section 103 and SARA section 304 (release to the environment)	The CERCLA definition of hazardous substances contains a "petroleum exclusion" clause which exempts crude oil, refined, and unrefined petroleum products and any indigenous components of such. However, other federal reporting requirements (e.g., SARA Section 304 as well as the Clean Water Act if the spill occurs on navigable waters) may still apply.

## NOTICE

This material safety data sheet and the information it contains is offered to you in good faith as accurate. We have reviewed any information contained in this data sheet which we received from sources outside our Company. We believe that information to be correct but cannot guarantee its accuracy or completeness. Health and safety precautions in this data sheet may not be adequate for all individuals and/or situations. It is the user's obligation to evaluate and use this product safely and to comply with all applicable laws and regulations. No statement made in this data sheet shall be construed as a permission or recommendation for the use of any product in a manner that might infringe existing patents. No warranty is made, either express or implied.