

# MATERIAL SAFETY DATA SHEET



NOTE: Read and understand Material Safety Data Sheet before handling or disposing of product.

## Material Safety Data Sheet:

May be used to comply with OSHA's Hazard Communication Standard 29 CFR 1910.1200. Standard must be consulted for specific requirements.

Note: Blank spaces are not permitted. If any item is not applicable, or no information is available, the space must be marked to indicate that.

### SECTION I - Product and Company Identification

<b>MATERIAL IDENTITY</b> <b>Product Name:</b> Natural Gas <b>Company Name and Address:</b> Kern River Gas Transmission Company 2755 East Cottonwood Parkway, #300 Salt Lake City, Utah 84121	<b>DATE PREPARED:</b> May 14, 2003, revised 5/26/05 <b>TELEPHONE NUMBERS:</b> 3E: (800) 451-8346  Kern River Gas Transmission Company: (801) 937-6000
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### SECTION II - Hazardous Ingredients / Identity Information

HAZARDOUS COMPONENTS (Specific Chemical Identity: Common Name(s) )	OSHA PEL*	ACGIH* TLV	CAS NO.	% (optional)
Methane	(1)	(1)	74-82-8	90 - 95
Ethane	(1)	(1)	74-84-0	<5
Propane	1000	2500	74-98-6	<3
Other Components	(1)	(1)	N.A.	<2

(1) No Limit Specified. A simple asphyxiant.

\* = Parts per million (ppm)

### SECTION III - Physical/Chemical Characteristics (For Methane)

<b>Boiling Point</b>	-161.5 <sup>o</sup> C	<b>Specific Gravity (H<sub>2</sub>O - 1)</b>	0.56 - 0.60
<b>Vapor Pressure (mm Hg.)</b>	N.A.	<b>Melting Point</b>	-182.5 <sup>o</sup> C
<b>Vapor Density (AIR - 1)</b>	0.415 @ -164 <sup>o</sup> C	<b>Evaporation Rate (Butyl Acetate - 1)</b>	N.A.

**Solubility in Water:** Negligibly soluble in water.

**Appearance and Odor:** Colorless, odorless, tasteless gas without odorant.

### SECTION IV - Fire and Explosion Hazard Data

<b>Flash Point (Method Used):</b> -297.8° F for Methane (closed cup)	<b>Auto-ignition Temp.:</b> 900° - 1170° F	<b>Flammable Limits in Air:</b> LEL: 3.8 – 6.5%      UEL: 13 – 17%
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**Extinguishing Media:** Stop flow of gas, carbon dioxide (CO<sub>2</sub>) and dry chemical.

**Special Fire Fighting Procedures:** Stop the flow of gas, cool adjacent exposed areas with water. Avoid extinguishing natural gas fires if ignition sources cannot be eliminated.

**Unusual Fire and Explosion Hazards:** Natural gas is lighter than air and may accumulate in pockets near the ceiling or roofs of rooms, buildings, or other structures. Containers of this material may explode if subjected to excess heat.

N.A. = NOT APPLICABLE

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SECTION V - Reactivity Data			
Stability	Unstable		Conditions to Avoid: Natural gas will spontaneously ignite when mixed with chlorine gas.
	Stable	X	
<b>Incompatibility:</b> (Materials to Avoid): Strong oxidizing agents such as bromide pentafluoride, oxygen difluoride, liquid oxygen and nitrogen trifluoride.			
<b>Hazardous Decomposition or Byproducts:</b> Thermal decomposition may release toxic oxides of carbon such as carbon dioxide and carbon monoxide.			
Hazardous Polymerization	May Occur		Conditions to Avoid: N.A.
	Will Not Occur	X	
SECTION VI - Health Hazard Data			
<b>Route(s) of Entry :</b> INHALATION: Yes                    SKIN: No                    INGESTION: No			
<b>Health Hazards:</b> <b>Effects of Acute Overexposure:</b> Natural Gas is nontoxic, however natural gas like other aliphatic hydrocarbons, is a simple asphyxiant. At high concentrations the natural gas will reduce the available percent of oxygen in the air, thus resulting in symptoms of headache, nausea, dizziness, fatigue and possibly coma and/or death. <b>Effects of Chronic Overexposure:</b> None reported.			
<b>CARCINOGENICITY :</b> NTP: No                    IARC MONOGRAPHS: No                    OSHA REGULATED: No			
<b>Signs and Symptoms of Exposure:</b> Symptoms of asphyxiation include rapid breathing, rapid heart beat, slight incoordination, emotional instability, exhaustion, and at very low oxygen concentrations nausea, vomiting, convulsions, and unconsciousness.			
<b>Medical Conditions Generally Aggravated by Exposure:</b> Acute and/or chronic respiratory conditions.			
<b>EMERGENCY AND FIRST AID PROCEDURES:</b> <b>Skin:</b> No data concerning skin exposure to natural gas. <b>Eyes:</b> No data found concerning the toxic effects of natural gas on the eyes. When exposed to pressurized vessels/piping, valves, fittings, etc. appropriate eye/face protection should be used. <b>Inhalation:</b> Remove the person to fresh air. If breathing has stopped, perform artificial respiration. If heart has stopped, perform CPR immediately. Keep affected person warm and at rest. Seek medical attention at once. <b>Ingestion:</b> No data concerning ingestion exposure to natural gas.			
SECTION VII - Precautions for Safe Handling and Use			

**Steps to Be Taken in case Material is Released or Spilled:** **EVACUATE THE AREA!** Notify emergency personnel; remove or eliminate all ignition sources; stop the source of the leak at the nearest control valve outside the involved area. Provide explosion-proof ventilation if possible. If ignited, do not extinguish flames until after the gas source has been controlled, let the fire burn itself out. Use water to cool surrounding facilities and equipment.

**Waste Disposal Method:** Disposal must be in accordance with applicable Federal, State, or Local regulations.

**Precautions to Be Taken in Handling and Storing:** Build storage facilities with an explosion-relief design to minimize damage from possible explosions. Do not exceed safe operating pressures of equipment designed to transport or store natural gas. Use explosion proof or intrinsically safe electrical equipment designed for the atmosphere in accordance with applicable codes, industrial recommended practices, and local, state, and federal regulations. Do not smoke or use spark-producing tools in area of use.

**Other Precautions:** Extremely flammable when concentrations are within flammable limits. May be ignited by heat, sparks, or flame. Vapors may travel to source of ignition and flash back. Containers may explode violently when exposed to heat or flame.

### SECTION VIII - Control Measures

**Respiratory Protection (Specify Type):** NIOSH/MSHA approved air supplied or SCBA in positive pressure mode in oxygen deficient atmospheres <19.5%.

**Ventilation: Local Exhaust:** Explosion-proof/intrinsically safe electrical ventilation equipment to assure safe oxygen level (> 19.5 % oxygen) and to reduce the atmosphere to no more than 10% of the Lower Explosion Limit (LEL).

**Protective Gloves:** Leather to protect from cold gas temperatures.

**Eye Protection:** Safety glasses/goggles to protect from pressurized gas.

**Other Protective Clothing or Equipment:** Hearing protection for high-pressure releases of natural gas.

**Work/Hygienic Practices:** Do not smoke or use spark producing tools in area of use, especially around known gas releases.

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