

Material Safety Data Sheet

OMB No. 1218-0072 (Non-Mandatory Form) From U.S. Department of Labor/OSHA



<u>IDENTITY:</u> Natural Gas	
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Section I

<u>Manufacturer's Name:</u> Southern California Gas Company	<u>Emergency Telephone Number:</u> Com'l/Industrial/Residential (800) 427-2000
<u>Address:</u> 555 West 5 th Street, GT 26G1 Los Angeles, CA 90013-1044	<u>Telephone Number for Information:</u> (213) 244 – 3244 (Safety & Health Department - general information)
	<u>Date Prepared:</u> UPDATED – 1/2009, 4/2010

Section II - Hazardous Ingredients/Identity Information

Hazardous Components (Specific Chemical Identity; Common Name(s))	OSHA PEL	ACGIH TLV	Other Limits Recommended	% (optional)
Methane CAS number 74-82-8	Cal/OSHA PEL none listed	Simple asphyxiant ACGIH TLV 1,000 ppm		approx. 93%
Ethane CAS number 74-84-0	Cal/OSHA PEL none listed	Simple asphyxiant ACGIH TLV 1,000 ppm		approx. 4%
Propane CAS number 74-98-6	Cal/OSHA PEL 1,000 ppm	Simple asphyxiant ACGIH TLV 1,000 ppm		approx. 1%
Butane CAS number 106-97-8	Cal/OSHA PEL 800 ppm	Simple asphyxiant ACGIH TLV 1,000 ppm		approx. 0.5%
Carbon Dioxide CAS number 124-38-9	Cal/OSHA PEL 5,000 ppm	Simple asphyxiant ACGIH TLV 5,000 ppm		approx. 1%

Section III - Physical/Chemical Characteristics

Boiling Point	-259 F (methane)	Specific Gravity (H ₂ O = 1)	* N/A
Vapor Pressure (mm Hg)	* N/A	Melting Point	*N/A
Vapor Density (AIR = 1)	0.58 - 0.63	Evaporation Rate (Butyl Acetate = 1)	*N/A
Solubility in Water: 3.5 ml/ 100 ml water at 17 C			

Appearance and Odor:

Colorless, odorless gas without odorants. When odorant is added – characteristic gas odor. Odorant may be comprised of some or all of the following components and/or blends thereof: Tetrahydrothiophene, tertiary-Butyl Mercaptan and other mercaptans.

Section IV - Fire and Explosion Hazard Data

Flash Point (Method Used): *N/A	Flammable Limits- Auto ignition Temp. 900 F to 1,300 F	LEL: 4.5 %	UEL: 15%
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Extinguishing Media:

Co2, dry chemical, or halon.

Special Fire Fighting Procedures:

For fires involving this material do not enter any enclosed or confined space without proper protective equipment – including self contained breathing apparatus (SCBA).

Unusual Fire and Explosion Hazards:

This gas is extremely flammable. A hazard from re-ignition or explosion exists if the flame is extinguished without stopping flow of gas and/or cooling surroundings and eliminating ignition source. Use water spray to cool surroundings and exposures.

Section V - Reactivity Data

Stability	Unstable		Conditions to Avoid:
	Stable	X	Readily mixes with air when released to create a combustible atmosphere.
Incompatibility (<i>Materials to Avoid</i>): Chlorine, bromine, pentafluoride oxygen difluoride and nitrogen trifluoride.			
Hazardous Decomposition or Byproducts: CO, by incomplete combustion.			
Hazardous Polymerization	May Occur		Conditions to Avoid: Ignition spontaneous when mixed with chlorine dioxide.
	Will Not Occur	X	Non-corrosive.

Section VI - Health Hazard Data

Route(s) of Entry:	Inhalation - Yes	Skin - No	Ingestion - Unlikely
Health Hazards (<i>Acute and Chronic</i>): <u>Inhalation:</u> At high concentrations, inhalation can produce dizziness, headache, incoordination and drowsiness. Simple asphyxiant –if gas displaces enough oxygen may cause suffocation. Odor may cause more sensitive individuals to feel nauseous.			
<u>Skin:</u> Not known to be a skin irritant. Skin absorption is unlikely.			
<u>Ingestion:</u> This material is a gas and under normal atmospheric conditions and ingestion is unlikely.			
<u>Carcinogenicity:</u> Ingredients listed in Section II are not regulated as a carcinogen by OSHA or contained in IARC or NTP listing.			

Signs and Symptoms of Exposure:

Light hydrocarbon gases are simple asphyxiants which, at high enough concentrations, can reduce the amount of oxygen available for breathing. Symptoms of overexposure can include shortness of breath, drowsiness, headaches, confusion, decreased coordination, visual disturbances and vomiting, and are reversible if exposure is stopped. Continued exposure can lead to hypoxia (inadequate oxygen), cyanosis (bluish discoloration of the skin), numbness of the extremities, unconsciousness and death. High concentrations of carbon dioxide can increase heart rate and blood pressure.

Medical Conditions Generally Aggravated by Exposure: Conditions aggravated by exposure may include respiratory (asthma-like) disorders. Exposure to high concentrations of this material may increase the sensitivity of the heart to certain drugs. Persons with pre-existing heart disorders may be more susceptible to this effect.

Emergency and First Aid Procedures:

Remove from exposure immediately (to fresh air) and seek medical attention. If breathing is irregular, start resuscitation, administer oxygen.

Section VII - Precautions for Safe Handling and Use

Steps to Be Taken in Case Material is Released or Spilled:

Evacuate area; provide optimum explosion-proof ventilation. Shut off supply, remove or eliminate ignition sources. Minor leaks can be detected with soap solution applied at suspected leak points. Never use a flame to detect leaks.

Waste Disposal Method:

Consult Federal, State or local authorities for proper disposal procedures.

Precautions to Be taken in Handling and Storing:

Keep away from flames and chemical oxidants (See Section V above).

Other Precautions:

Proposition 65: This product contains a material which is known by the State of California to cause cancer or reproductive harm.

Section VIII - Control Measures

Respiratory Protection (Specify Type):

NIOSH approved airline respirators (Type C) or SCBA, if oxygen deficiency suspected.

Ventilation	Local Exhaust May be needed to control accumulation of gas.	Special
	Mechanical (General) Explosion proof equipment to provide adequate fresh air supply.	Other

Protective Gloves:

Chemical resistant gloves are not required but considered good practice to wear when working with chemicals.

Eye Protection:

Chemical goggles.

Other Protective Clothing or Equipment:

Flame retardant clothing should be worn in potentially flammable areas.

Work/Hygienic Practices:

Be extremely cautious – gas is extremely flammable.

* Not Applicable