

**MATERIAL SAFETY DATA SHEET**  
**Updated 3-11-2010**  
May be used to comply with  
**OSHA's Hazard Communication Standard**  
**29 CFR 1910.1200. Standard must be**  
**consulted for specific requirements.**

**U.S. DEPARTMENT OF LABOR**  
**Occupational Safety and Health Administration**  
**(Non-Mandatory Form)**  
**Form Approved**

IDENTITY (As used on Label and List)

Liquefied Petroleum Gas (LPG, Propane)

### SECTION I - General

Chemical Formula: CH<sub>3</sub>CH<sub>2</sub>CH<sub>3</sub>  
**1-800-424-9300 as of 3-11-2010**

**Transportation Emergency number: CHEMTREC**

Chemical Family: Aliphatic Hydrocarbon

**Supplier:** Coastal Energy, LLC  
250 Ricefield Way  
Brunswick, Ga. 31525 **Contact: (770)**

**578-7686 or (770)265-6066**

### SECTION II - Physical Properties

Boiling Point:	-43.7°F	Specific Gravity (H <sub>2</sub> O = 1):	.505 liquid
Vapor Pressure:	7800 MM HG @ 80°F	Melting Point:	-305.8°F
Vapor Density (AIR = 1)	1.56	PH Information:	PH: N.A.

Solubility in Water: Negligible

Appearance and Odor: Colorless liquefied gas with mercaptan odor added at lifting point.

### SECTION III - Fire and Explosion Hazard Data

Flash Point :	-156°F	Autoignition Temp:	871°F
Explosive Limits (% by volume in air):		Lower: 2.1	Upper: 95

Extinguishing Media: Class B fire extinguishing media such as halon, CO<sub>2</sub>, dry chemical or water spray can be used.  
Fire fighting should be attempted only by those who are adequately trained.

Special Fire Fighting Procedures: Stop the flow of gas and allow fire to burn out. Extinguishing the flame before shutting off the supply can cause the formation of explosive mixtures. In some cases it may be preferred to allow flame to burn. Keep the surrounding area cool with water spray and prevent further ignition of combustible material. Water may be ineffective in extinguishing low flash point fires, but may be used to cool exposed surfaces. Avoid contact with skin. Contact with water and liquefied product can cause increased vaporization. Avoid excessive water application.

Stability: The material is stable at 70°F, 750 MM pressure  
of heat ignition. Conditions to Avoid: Sources

Hazardous Decomp. Prods.: Carbon Monoxide, Ethane, Ethylene  
occur. Hazardous Polymerization: Will not

Incompatible Materials: Strong oxidizers (e.g. chlorine), Mineral Acids

### SECTION IV - Product Composition and Exposure Limits

Exposure Limits:	<u>PRODUCT</u>	<u>TLV</u>	<u>SOURCE</u>
	Liquefied Petroleum Gas	1000.00 PPM (8hr TWA)	ACGIH
		1000.00 PPM (8hr TWA)	OSHA

Product Composition:	<u>COMPONENTS</u>	<u>PERCENT RANGE</u>	<u>TLV</u>	<u>SOURCE</u>
	Propane	90.00%	0.00	
			1000.00 PPM 8hr TWA	
OSHA				
	Methane	.10%	0.00	
	Ethane	6.00%	0.00	
	Propylene	5.00%	0.00	
	C <sub>4</sub> -C <sub>7</sub> Hydrocarbons	2.50%	0.00	

Page 1 of 3

PROPANE

Ethyl Mercaptan (1525 PPM) is added as an odorant. The odor threshold of the Mercaptan is 1 PPB.

Propane - Simple asphyxiant by ACGIH, oxygen limiting factor.

Propylene - Simple asphyxiant by ACGIH, oxygen limiting factor.

**SECTION V - Potential Health Effects**

Eye: LPG vapor is generally non-irritating to eyes. Direct contact with liquefied product can cause "cold burn" or frostbite.

Skin: LPG vapor is generally non-irritating to skin. Direct contact with liquefied product can cause "cold burn" or frostbite.

Inhalation: Propane is an anesthetic at high concentrations, producing dizziness, headache, in coordination and narcosis; extremely high concentration can cause asphyxiation by exclusion of oxygen.

Ingestion: Ingestion not likely.

**SECTION VI - Emergency First Aid Procedures**

Eye: IF LIQUID: Do not flush with water. Immediately call a physician. IF GAS: Call a physician if symptoms of irritation occur.

Skin: Remove contaminated clothing. Thaw frostbitten areas slowly with lukewarm water or by wrapping affected areas with blankets. Let circulation reestablish itself naturally, exercising area if possible. Immediately call a physician.

Inhalation: Move person to fresh air. If not breathing or if no heartbeat, give artificial respiration or cardiopulmonary resuscitation (CPR). Immediately call a physician.

Ingestion: Ingestion not likely. If swallowed, immediately call a physician.

**SECTION VII - Special Protection Information**

Ventilation: Local or general exhaust required in an enclosed area or with inadequate ventilation.

Respiratory Protection: Atmosphere supplying respirator in the event of oxygen deficiency or when concentrations exceed permissible limits. Observe respiratory protection factor criteria cited in NSI z88.2 (1980).

Self-contained breathing apparatus should be used for fire fighting.

Eye Protection: Goggles or face shield.

Protective Gloves: Insulated gloves to prevent frostbite.

Other Protective Equip.: Use mechanical ventilation equipment that is explosion proof.

**SECTION VIII - Spill or Leak Procedures**

Environmental Effects: Possible freezing effect on plant and animal life. Large liquid spills will readily vaporize (cloud formation) producing ignition and asphyxiation hazard. The aquatic TLM 96 is >100 PPM.

Steps to Take in Case of Spill, Leak, or Release: Keep public away. Shut off source if possible. Leaking containers should be moved outdoors or to an isolated well ventilated area and contents transferred to a suitable container. Advise police

or **National Response Center**

**(800-424-8802)** if substance has entered a watercourse or sewer.

Waste Disposal Method: Preferred method of disposal is burning as a vapor in a properly designed flare. Special care must be taken to ensure complete dissipation of gas below lower explosive limit and to prevent cloud formation.

### SECTION IX - Handling and Storage Precautions

Product should be handled and stored in accordance with industry accepted practices. In the absence of specific local code requirements, NFPA or OSHA requirements should be followed. Use closed containers that are appropriately labeled. Do not expose to heat, open flame, oxidizers or other sources of ignition. Avoid over pressuring or overfilling cylinders. Avoid skin contact. Exercise good personal hygiene including removal of soiled clothing and prompt washing with soap and water.

**HAZARD WARNING DANGER! EXTREMELY FLAMMABLE! LIQUID AND GAS UNDER PRESSURE! LIQUID CAN CAUSE FROST BURNS!**

### SECTION X - Regulatory Information

Sara Title III/Superfund Amendments and Reauthorization Act of 1986 - Section 302,304,311,312 and 313.

The following regulations apply to this product:

Page 2 of 3

PROPANE

Sections 311 & 312 - Material Safety Data Sheet Requirements

Depending on local, state and federal regulation, material safety data sheet (MSDS) of lists of MSDS's (Product Names) may be required to be submitted to the State Emergency Response Commission, local Emergency Planning Committee and local fire department if you have:

10,000 pounds or more of an OSHA hazardous substance\* or 500 pounds or the threshold planning quantity whichever is less, of an extremely hazardous substance.

\*Reportable quantity levels can vary from state to state and year to year depending on applicable state and/or federal regulations.

This product is covered under the criteria defined in OSHA's hazard communication standard 29 CFR 1910.1200 (52 FR 31852-August 24, 1987) and should be reported under the following EPA hazard categories:

XX	Immediate (acute) Health Hazard
	Delayed (chronic) Health Hazard
XX	Fire Hazard
XX	Sudden Release of Pressure Hazard
	Reactive Hazard

Section 313 - Toxic Chemical Release Reporting

40 CFR Part 372

53 FR 4500 - February 16, 1988; 53 FR 12728 - April 18, 1988; 53 FR 23108 - June 20, 1988

This product contains the following component(s) (at a level of 1% or greater if hazardous; .01% or greater if carcinogenic) that is/are identified on the Section 313 Toxic Chemical List:

<u>COMPONENT</u>	<u>CAS NUMBER</u>
Propylene	115-07-1

## **SECTION XI - Regulations / Comments**

Department of Transportation - 49 CFR 172.101 as revised on October 1, 2003

Proper Shipping Name: Liquefied Petroleum Gas  
D.O.T. Classification: Flammable Gas  
D.O.T. Identification: UN 1075

## **SECTION XII - Disclaimer**

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of **Coastal Energy's** knowledge and belief, accurate and reliable as of the date indicated. However, no representation, warranty or guarantee is made as to its accuracy, reliability, or completeness. It is the user's responsibility to satisfy himself as to the suitability and completeness of such information for his own particular use.

Page 3 of 3

PROPANE