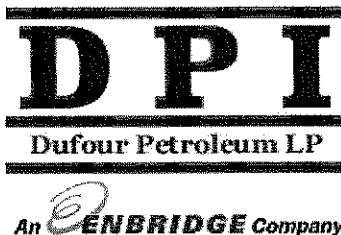


MSDS *Material Safety Data Sheet:* Propane



SECTION I

CORPORATE IDENTIFICATION

Emergency telephone number: 800-424-9300 (Chemtree)

DPI., P.O. Box 1184, Petal, MS 39465

General Information: (601) 583-9991

SECTION II

PRODUCT/INGREDIENT

<u>Trade Name</u> Propane	<u>CAS Registry No.</u> 74-98-6	<u>NFPA Hazard Rating</u> (0=Least, 4=Extreme) 1 Health 4 Fire 0 Reactivity
<u>DOT Bill of Lading</u> Liquefied Petroleum Gas, 2.1, UN1075, "NONCOR"	<u>U.S. DOT Classification</u> Flammable Gas	<u>I.D. No.</u> UN1075

SECTION III

HAZARD COMPONENTS

<u>Chemical Name</u> Propane	<u>OSHA TWA</u> 1000 pp	<u>ACGIH TLV</u> Asphyxiant	<u>Other Limits</u>
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Common Name(s)
Dimethylmethane
Liquefied Petroleum Gas
Liquefied Compressed Gas

Formula
CH₃CH₂CH₃

NOTE: May include Ethyl Mercaptan (0.1%) as an odorant per required applicable regulations.

SECTION IV

PHYSICAL AND CHEMICAL CHARACTERISTICS

<u>Boiling Point</u> -44° @ 14.70 PSIA	<u>Specific Gravity (H₂O = 1)</u> 0.590
<u>Vapor Pressure</u> 190 - 208 PSI	<u>Melting Point</u> -360° F
<u>Vapor Density</u> 1.56	<u>Evaporation Rate</u> (butyl acetate = 1) Very Rapid
<u>Solubility in Water</u> Insoluble	<u>% Volatile by Volume</u> 100%
<u>Appearance and Odor</u> Colorless, odorless gas unless odorant is added	<u>Other</u>

SECTION V**FIRE AND EXPLOSION HAZARD DATA****Flash Point (method used)**

-156° Fahrenheit

Flammable LimitsLEL - 2.0 UEL - 9.5**Extinguish Media**Dry chemical, CO₂ or foam

Water spray (fog) can be used to dissipate vapors.

Special Fire Fighting Procedures

Gas fires should not be extinguished unless the gas flow can be stopped immediately. Shut off gas source and allow the fire to burn itself out. If the source cannot be shut off immediately, all equipment and surfaces exposed to the fire should be cooled with water to prevent overheating, flashbacks, or explosions. Control fire until gas supply can be shut off. Firemen must use proper protective equipment including respiratory apparatus to protect against hazardous combustion products/oxygen deficiencies.

Unusual Fire and Explosion Hazards

The gas releases flammable vapors at well below ambient temperatures and readily forms flammable mixtures with air. Exposed to an ignition source, it will burn in the open or be explosive in confined spaces. Its vapors are heavier than air and may travel long distances to a point of ignition and then flash back. Alkane/chlorine gas mixtures have produced explosions.

SECTION VI**REACTIVITY DATA****Stability**

Stable

Conditions to avoid

Heat, sparks, open flames

Materials to Avoid

Strong acids, alkalis, and oxidizers

Hazardous Decomposition By-products

Burning may result in sulfur dioxide and sulfur trioxide fumes, smoke, carbon monoxide and carbon dioxide

Hazardous Polymerization

Will not occur

SECTION VII**HEALTH HAZARD DATA****Route(s) of Entry:****Inhalation?**

Yes

Skin?

Yes

Ingestion?

Yes

Summary of Acute Hazards

Inhalation may produce mild intoxication, drowsiness, or loss of coordination. High concentrations produce intoxication followed by loss of consciousness, asphyxiation, and death.

Carcinogenicity:

No

NTP?

No

IARC Monographs**OSHA Regulated****ACGIH****Signs and Symptoms of Exposure****Inhalation**

Exposure may produce rapid breathing, headache, dizziness, visual disturbances, muscular weakness, tremors, narcosis, unconsciousness, and death depending on concentration and time of exposure.

q

Skin

Exposure to liquid could result in frostbite symptoms.

Medical Conditions Generally Aggravated by Exposure

SECTION VII**HEALTH HAZARD DATA (cont.)**

Caution is recommended for personnel with pre-existing central nervous system disorders. Personnel with pre-existing chronic respiratory diseases should refrain from breathing this material.

Emergency and First Aid Procedures

- Eyes** Vapors are not expected to present an eye irritation hazard. If contacted by liquid/solid, immediately flush the eye(s) gently with warm water for at least 15 minutes. Seek medical attention if pain or redness persist.
- Inhalation** Immediately move personnel to area of fresh air. For respiratory distress, give air oxygen, or administer CPR (Cardiopulmonary Resuscitation). If necessary, obtain medical attention if breathing difficulties continue.
- Skin** Frozen tissues should be flooded or soaked with warm water (105-115 Deg. F). Do not use hot water! Cryogenic burns which result in blistering or deeper tissue freezing should be promptly seen by a physician.
- Ingestion** DO NOT induce vomiting. Seek medical attention immediately.

SECTION VIII**SPILL AND DISPOSAL****Precautions if Material is Spilled or Released**

Eliminate all potential sources of ignition. Evacuate all non-essential personnel to an area upwind (at least 1/2 mile in all directions if tanks or tank cars are involved in fire). Stop source of release with non-sparking tools before putting out any fire. Ventilate enclosed areas to prevent formation of flammable or oxygen-deficient atmospheres. Water spray may be used to reduce vapors. Closed systems form white frost that does not readily disperse. Avoid vapor cloud even with proper respiratory equipment.

Waste Disposal Method

Releases are expected to cause only localized non-persistent environmental damage. Waste mixtures containing these gases should not be allowed to enter drains or sewers where there is danger of their vapors becoming ignited. When it becomes necessary to dispose of these gases, it is preferable to do so as a vapor. Unused product may be used as an auxiliary fuel or disposed by burning in a properly designed flare or incinerator. Venting of gas to the atmosphere should be avoided. Defective, empty, or partially used portable containers should be returned to the supplier with appropriate tags.

SECTION IX**PROTECTIVE EQUIPMENT AND CONTROL MEASURES****Respiratory Protection (specify type)**

Use supplied air or self-contained breathing equipment in confined or enclosed spaces.

Ventilation

- Local Exhaust** Ventilate to avoid accumulation of explosive vapors.
- Special** No smoking or open lights.
- Mechanical (General)** Use explosion-proof equipment and non-sparking tools in areas where explosive vapors may form.

Protective Gloves

Prevent potential skin contact with cold liquid, solid, vapors. Use insulated, impervious plastic or neoprene coated gloves.

Eye Protection

Use chemical-type goggles and face shield when handling liquefied gases.

Other Protective Clothing or Equipment

Appropriate impervious clothing for prolonged or repeated exposures.

Work/Hygienic Practices

Avoid direct contact with liquid.

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