

Material Safety Data Sheet

Product Name: **PROPANE**

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SECTION 1 - PRODUCT IDENTIFICATION

Product Name:	PROPANE	Manufacturer / Distributor DCP Midstream 370 17 th Street, Suite 2500 Denver, CO 80202
Synonyms:	Dimethyl Methane HD-5 Propane	Emergency Phone Numbers: (800) 424-9300 (Chemtrec) (303) 595-3331 (DCP Midstream)
Chemical Family:	Aliphatic Hydrocarbon	CAS #: 74-98-6
Chemical Formula:	CH ₃ CH ₂ CH ₃	

SECTION 2 - PHYSICAL PROPERTIES

Boiling Point -40° F	Melting Point N.A.	Specific Gravity (H ₂ O = 1) 0.5077
% Solubility in Water Slight	Vapor Density (Air = 1) 1.5	Vapor Pressure 760 mm Hg @ 25° C
PH N.A.	Odor Odorless	Appearance Colorless Gas

SECTION 3 - FIRE AND EXPLOSION HAZARD DATA

Flash Point -156° F	Autoignition Temp. 450° C	Explosive Limits (% by Volume in Air) Lower / Upper 2.1 / 9.5
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NFPA Classification: Health: 1 Fire: 4 Reactivity: 0 Other:

Extinguishing Media:

Class b fire extinguishing media such as halon, co₂ or dry chemical 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 the flame to continue to burn. Keep the surrounding area cool with water spray and prevent further ignition of combustible material.

Stability: The Material Is Stable

Conditions To Avoid: Sources Of Heat Or Ignition

Hazardous Decomposition Products: Carbon Monoxide, Carbon Dioxide

Incompatible Materials: Strong Oxidizers (E. G. Chlorine) , Mineral Acids

Hazardous Polymerization: Will Not Occur

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SECTION 4 - PRODUCT COMPOSITION AND EXPOSURE LIMITS

CAS #	Components	Percent Range	TLV (ACGIH)	PEL (OSHA)	REL (NIOSH)
74-98-6	Propane	97 - 98	4508 mg/m ³	1000 ppm**	1000 ppm
106-97-8	Butanes	< 1.5	NE	800 ppm*	800 ppm
115-07-1	Propylene	< 5	NE	NE	NE

8hr TWA unless otherwise specified

* For n-butane

** Propane is a simple asphyxiant by ACGIH standards.

SECTION 5 - POTENTIAL HEALTH EFFECTS

Eye:

Propane is generally non-irritating to eyes. Pressurized gas can cause mechanical injury to the eye. Liquefied gas may cause freeze burns upon direct contact.

Skin:

Liquefied gas may cause freeze burns upon direct contact.

Ingestion:

Ingestion not likely

Inhalation:

Simple asphyxiant

Additional Toxicity Information:

Extreme over exposure may produce dizziness, headache, disorientation, excitation, fatigue, inability to concentrate, vomiting, coughing, anesthesia, unconsciousness and death.

Emergency First Aid Procedures

Eye:

Immediately flush eyes with running water for at least fifteen minutes. Call a physician if symptoms or irritation occur.

Skin:

Immediately flush skin with running water for at least fifteen minutes. Call a physician if symptoms or irritation occur.

Inhalation:

Move person to fresh air if not breathing or if no heartbeat, give artificial respiration or cardiopulmonary resuscitation. Immediately call physician.

Ingestion:

Ingestion not likely.

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SECTION 6 - SPECIAL PROTECTION INFORMATION

Ventilation:

Local or general exhaust required if used in an enclosed area in order to keep concentrations below the lower explosive limit.

Respiratory:

Use atmosphere supplied respirators in the event of oxygen deficiency.

Self-Contained Breathing Apparatus should be used for fire fighting.

Use a NIOSH / MSHA approved SCBA.

Eye Protection:

Goggles or face shield may be needed when handling pressurized gases.

Other Protective Equipment:

Use explosion-proof equipment.

SECTION 7 - SPILL OR LEAK PROCEDURES

Environmental Effects:

Most components of propane are heavier than air and will stay in low lying areas if ventilation or wind is not present.

Steps To Be Taken In Case Of Spill, Leak Or Release:

Keep public away. Shut off source if possible to do so without hazard. Wear appropriate safety equipment if conditions warrant. Protect from ignition. Ventilate area thoroughly. Advise local and state emergency services agencies, if appropriate.

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 propane below lower explosive limit.

SECTION 8 - 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 appropriate grounding and bonding practices. Store in properly closed containers that are appropriately labeled. Do not expose to heat, open flame, strong oxidizers or other sources of ignition.

Naturally Occurring Radioactive Materials (NORM)

Industry experience indicates that natural gas may contain small amounts of radon, a naturally occurring radioactive gas. The solid decay products of radon, called radon daughters, can accumulate inside production and process equipment handling natural gas liquids. Scales, deposits, and sludges from this equipment may have a significant accumulation of this NORM.

Gamma radiation may be detected above background external to equipment contaminated with this type of NORM. Such equipment should be assessed for external gamma radiation; access around the equipment may need to be restricted in accordance with OSHA 29 CFR 1910.96 during operation. Regardless of external gamma radiation levels, this equipment should also be assumed to be internally contaminated with long half-life decay products that emit beta and alpha radiation, which is a radiation hazard if inhaled or ingested. Unless measurements indicate otherwise, steps should be taken to minimize skin and inhalation exposure to NORM dusts/mists by wearing personal protective clothing (such as Tyvek® (DuPont), utilizing respiratory protection (minimum of HEPA filter), and practicing good personal hygiene.

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SECTION 9 - HAZARD WARNING

Danger!
Extremely Flammable
Gas Under Pressure

SECTION 10 - REGULATORY INFORMATION

Sara Title III / Superfund Amendments And Re-Authorization Act Of 1986 -Sections 302, 304, 311, 312 and 313.

The following regulations apply to this product:

Sections 311 And 312 - Material Safety Data Sheet Requirements:

40 CFR Part 370 (52 Fr 38344 - October 15, 1987).

Depending on local, state, and federal regulations, material safety data sheets (msd's) or list of msd'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:

Immediate (Acute) Health Hazard
Delayed (Chronic) Health Hazard
XX Fire Hazard
XX Sudden Release Of Pressure Hazard
Reactive Hazard

Department Of Transportation:

49 CFR 172.01 as revised on May 1, 1997

Proper Shipping Name: Liquefied Petroleum Gas
Dot Classification: Flammable Gas
Dot Identification Number: Un 1075
Placard: Flammable Gas / 1075
Hazard Class: 2.1

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SECTION 11 - COMMENTS

MSDS Date: 02 / 22 / 94

MSDS Updated: 01 / 11 / 2007

*** Disclaimer ***

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