



# Safety Data Sheet

## Propane

### Propane Solutions Inc

11624 S Mayfield Ave, Alsip, Illinois, 60803  
Emergency Phone: CHEMTREC 1-800-424-9300  
[www.propanesolutionsinc.com](http://www.propanesolutionsinc.com)

## Section 1: Product and Company Identification

### Propane Solutions Inc

11624 S Mayfield Ave, Alsip, Illinois, 60803  
(708) 500-4128  
Emergency Phone : CHEMTREC 1-800-424-9300  
[www.propanesolutionsinc.com](http://www.propanesolutionsinc.com)

### Product Code: Propane

Part Number: 74-98-6

**Synonyms:** C3H8

**Recommended Use:** Industrial use. Commercial use. Agricultural use. Heating. Use as directed.

**Usage Restrictions:**

## Section 2: Hazards Identification



### Hazard Classification:

Flammable (Category 1), H220

Gases Under Pressure, H280

Simple Asphyxiant, OSHA-H01

H220: Extremely flammable gas

H280: Contains gas under pressure; may explode if heated

CGA-HG04: MAY FORM EXPLOSIVE MIXTURES WITH AIR.

OSHA-H01: MAY DISPLACE OXYGEN AND CAUSE RAPID SUFFOCATION.

### Precautionary Statements

P202: Do not handle until all safety precautions have been read and understood.

P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P271+P403: Use and store only outdoors or in a well-ventilated place.

P377: Leaking gas fire: Do not extinguish, unless leak can be stopped safely.

P381: In case of leakage, eliminate all ignition sources.

CGA-PG02: Protect from sunlight when ambient temperature exceeds 52C (125F).

CGA-PG05: Use a back flow preventive device in the piping.

CGA-PG06: Close valve after each use and when empty.

CGA-PG10+CGA-PG20: Use only with equipment of compatible materials of construction and rated for cylinder pressure.

CGA-PG11: Never put cylinders into unventilated areas of passenger vehicles.

CGA-PG12: Do not open valve until connected to equipment prepared for use.

CGA-PG27: Read and follow the Safety Data Sheet (SDS) before use.

## Section 3: Composition/Information on Ingredients

	CAS #	Concentration
Propane	74-98-6	100%

	Trade Names
Propane	PROPANE n-Propane Dimethylmethane 74-98-6 Propyl hydride propan

## Section 4: First Aid Measures

IF ON SKIN: wash with plenty of water. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Get medical advice/attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do - continue rinsing.

## Section 5: Fire Fighting Measures

### Suitable Extinguishing Media:

Dry powder, carbon dioxide, cool surrounding area with fine water mist.

### Protection of Firefighters:

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

	Products of Combustion
Propane	Oxides of carbon

## Section 6: Accidental Release Measures

### Personal Precautions:

Keep unnecessary people away, isolate hazard area and deny entry. Ventilate closed spaces before entering.

### Environmental Precautions:

Keep away from drains, surface and ground water. Avoid heat, flames, sparks and other sources of ignition.

### Methods for Containment and Cleanup:

Stop leak if possible without personal risk. Reduce vapors with water spray. Remove sources of ignition. If necessary, cover drains. Absorb large spills, dispose in appropriate containers.

## Section 7: Handling and Storage

### Handling:

See precautions in Section 2. Only trained personnel should handle this product. Always use approved personal protective equipment.

**Storage:**

Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Store and handle in accordance with all current regulations and standards. Store in a well-ventilated area. Keep separated from incompatible substances.

	Incompatibilities	Conditions to avoid
Propane	Oxidizing materials, combustible materials, halogen compounds,	Avoid heat, flames, sparks and other sources of ignition. Minimize contact with material. Containers may rupture or explode if exposed to heat.

## Section 8: Exposure Controls/Personal Protection

Exposure Guidelines	Threshold Limit Value -TLV (ppm)
Propane	1000

### Engineering Controls

No specific controls are needed.

**Eye Protection** Wear splash resistant safety goggles.  
**Skin Protection** Wear chemical protective clothing, including gloves.  
**Respiratory Protection** Use self-contained breathing apparatus.

### General Hygiene considerations

- Avoid breathing vapor or mist
- Avoid contact with eyes and skin
- Wash thoroughly after handling and before eating or drinking

## Section 9: Physical and Chemical Properties

	Physical State / Physical Form	Appearance / Color	Odor	Flash Point	Flammability	Partition Coefficient
Propane	Gas	Colorless	Gasoline odor	-157 F (-105 C)	True	2
	Autoignition Temperature	Upper Explosive Limits	Lower Explosive Limits	Boiling Point	Freezing Point	Vapor Pressure
Propane	842 F (450 C)	9.5	1.7	-40 F (-40 C)	-310 F (-190 C)	124.91
	Vapor Density	Specific Gravity	Water Solubility	pH	Evaporation Rate	Viscosity
Propane	1.55	0.5853 @ -45 C	Very slightly soluble	0	Not applicable	Not available
	Molecular Weight	Molecular Formula	Density	Volatility	Solvent Solubility	
Propane	44.097	C-H3-C-H2-C-H3	0.4985358	Not applicable	Soluble : Absolute alcohol, ether, chloroform, benzene, turpentine	

## Section 10: Stability and Reactivity

	Stability	Conditions to Avoid	Incompatible Materials
Propane	Stable at normal temperatures and pressure.	Avoid heat, flames, sparks and other sources of ignition. Minimize contact with material. Containers may rupture or explode if exposed to heat.	Oxidizing materials, combustible materials, halogen compounds,

	Hazardous Decomposition Products	Possibility of Hazardous Reactions
Propane	Oxides of carbon	Will not polymerize.

## Section 11: Toxicology Information

The toxicology information is calculated for the mixture.

### Acute Toxicity Estimates (ATE) of the mixture.

Oral ATE (mg/kg)	Not Available
Inhalation ATE (ppm)	Not Available
Dermal ATE (mg/kg)	Not Available

### Additional health hazards:

OSHA-H01: MAY DISPLACE OXYGEN AND CAUSE RAPID SUFFOCATION.

Skin Corrosion/Irritation	Not Available
Eye Damage/Irritation	Not Available
Respiratory or Skin Sensitization	Not Available
Germ Cell Mutagenicity	Not Available
Carcinogenicity	Not Available
Reproductive Toxicity	Not Available
STOT – single exposure	Not Available
STOT – repeated exposure	Not Available
Aspiration Hazard	Not Available

## Section 12: Ecological Information

### Fate and Transport

	Eco toxicity	Persistence / Degradability	Bioaccumulation / Accumulation	Mobility in Environment
Propane	Fish toxicity: 0 Invertebrate toxicity: Algal toxicity: Phyto toxicity: Other toxicity:	Not available	Not available	Not available

## Section 13: Disposal Considerations

Dispose in accordance with all applicable regulations. Do not dispose in sewers or waterways. Recycle if possible to do so. Return to manufacturer for disposal if needed.

## Section 14: Transportation Information

### U.S. DOT 49 CFR 172.101

	Proper Shipping Name	ID Number	Hazard Class or Division	Packing Group	Passenger Aircraft or Railcar Quantity Limitations	Cargo Aircraft Only Quantity Limitations	Additional Shipping Description
Propane	Propane	UN1978	2.1	Not available	Not available	Not available	Not available

## Canadian Transportation of Dangerous Goods

	Shipping Name	UN Number	Class	Packing Group / Risk Group
Propane	Propane	UN1978	2.1	Not Available

## Section 15: Regulatory Information

### U.S. Regulations

	CERCLA Sections	SARA 355.30	SARA 355.40
Propane	Not Regulated.	Not Regulated.	Not Regulated.

### SARA 370.21

	Acute	Chronic	Fire	Reactive	Sudden Release
Propane	Yes	No	Yes	No	Yes

### SARA 372.65

Propane	Not Regulated.
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### OSHA Process Safety

Propane	Not regulated.
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### State Regulations

	CA Proposition 65
Propane	Not regulated.

### Canadian Regulations

	WHMIS Classification
Propane	A, B1.

### National Inventory Status

	US Inventory (TSCA)	TSCA 12b Export Notification	Canada Inventory (DSL/NDSL)
Propane	Propane	Not listed.	Listed on DSL.

## Section 16: Other Information

	NFPA Rating
Propane	Health = 2, Flammability = 4, Instability = 0

0 = minimal hazard, 1 = slight hazard, 2 = moderate hazard, 3 = severe hazard, 4 = extreme hazard