■ SIGNAL WORD: DANGER

H220 Extremely flammable gas.
H280 Contains gas under pressure; may explode if heated.

SECTION 1: IDENTIFICATION

Product Name	Propane
CAS Number	74-98-6
Synonyms	Dimethylmethane; Propyl Hydride; LPG; R-290; HC-290; Commercial Propane
Product Use	Fuel; refrigerant; industrial feedstock; propellant; solvent
Supplier	Cannagas Supply 97 Turnpike Rd, Westborough, MA 01581
Phone	877-710-1965
Email	Sales@canna-gas.com
Emergency Phone	CHEMTREC: 1-800-424-9300 (24-hour)
SDS Revision Date	March 2026

SECTION 2: HAZARDS IDENTIFICATION

GHS Classification	Flammable Gases – Category 1A Gases Under Pressure – Liquefied Gas Simple Asphyxiant
Signal Word	**DANGER**
Hazard Statements	H220: Extremely flammable gas. H280: Contains gas under pressure; may explode if heated. Simple asphyxiant at high concentrations.
Precautionary – Prevention	P210: Keep away from heat, sparks, open flames, hot surfaces. No smoking. P377: Leaking gas fire: Do not extinguish unless leak can be stopped safely. P381: In case of leakage, eliminate all ignition sources.
Precautionary – Response	P304+340: IF INHALED: Remove to fresh air. Keep at rest. P315: Seek immediate medical attention if high concentration exposure occurs. For cryogenic liquid contact: flush with lukewarm water. Seek medical attention.
Precautionary – Storage	P403: Store in a well-ventilated place. P410+P403: Protect from sunlight. Store in well-ventilated place.
Precautionary – Disposal	P501: Dispose of contents/container per local/regional/national regulations.
HMIS® Ratings	Health: 1 | Flammability: 4 | Physical Hazard: 1

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	CAS Number	Concentration	EC Number
Propane	74-98-6	≥95% (v/v)	200-827-9

Commercial propane may contain minor amounts of propylene, ethane, butane, and odorant (ethyl mercaptan). Shipped as liquefied compressed gas. MW: 44.10 g/mol.

SECTION 4: FIRST-AID MEASURES

Inhalation	Remove to fresh air immediately. Keep warm at rest. Apply artificial respiration and oxygen if not breathing. Seek immediate medical attention. High concentrations act as simple asphyxiant.
Skin Contact	For cryogenic liquid contact: flush with lukewarm (not hot) water. Do NOT rub. Treat frostbitten tissue gently. Seek immediate medical attention.

Eye Contact	For cryogenic contact: flush with tepid water (105–115°F) for 15 minutes. Do NOT use hot water. Seek immediate medical attention.
Ingestion	Not a typical route of exposure for gases. Not applicable under normal conditions.
Key Symptoms	Simple asphyxiant — displaces oxygen at high concentrations causing dizziness, unconsciousness, death. Cryogenic liquid causes frostbite. Mild anesthetic effects at sub-asphyxiant concentrations.
Medical Note	Treat symptomatically. Inform medical personnel of substance involved.

SECTION 5: FIRE-FIGHTING MEASURES

Suitable Extinguishing Media	Dry chemical, CO_2, water spray or fog. Class B extinguishing agents.
Unsuitable Extinguishing Media	Do not use direct water jet on liquid — this will spread the fire.
Specific Hazards	Extremely flammable gas. Vapors are heavier than air and may travel long distances to ignition sources. Cylinders may explode when heated ("BLEVE"). Do NOT extinguish burning gas unless flow can be immediately stopped. Ruptured cylinders may rocket.
Protective Equipment	Self-contained breathing apparatus (SCBA) and full protective clothing required.
Additional Guidance	Do not extinguish leaking gas fire unless flow can be immediately stopped. Shut off gas and allow fire to burn out. Cool fire-exposed containers with water spray from maximum distance. Withdraw immediately if venting safety devices sound or tank discolors.
Flash Point	-156°F (-104°C) – Not applicable (gas)
Auto-Ignition Temperature	842–874°F (450–468°C)
Flammable Limits (LEL/UEL)	2.1% / 9.5% in air

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions	Keep unnecessary personnel away. Eliminate all ignition sources. Wear appropriate PPE. Ventilate enclosed spaces before entry. Stay upwind.
Environmental Precautions	Avoid discharge into drains, waterways, or onto the ground. Notify authorities if spill cannot be contained.
Small Spills	Stop flow if possible. Ventilate area. Remove ignition sources.
Large Spills	Evacuate area. Stop flow if possible. Contact emergency services. Ventilate thoroughly. Remove all ignition sources.
Important	Never return spills to original containers. Use non-sparking tools. Take precautions against static discharge.

SECTION 7: HANDLING AND STORAGE

Safe Handling	Use only in well-ventilated areas. Bond and ground equipment during transfer. Do not use open flame for leak detection — use combustible gas detector. Follow OSHA 29 CFR 1910.110 for LP-gas storage and handling.
Safe Storage	Store cylinders upright outdoors or in approved, ventilated storage. Protect from sunlight and heat sources. Max storage temperature: 120°F (49°C). Comply with NFPA 58 and applicable local regulations.
Incompatibles	Strong oxidizing agents, chlorine, chlorine dioxide, strong acids, alkalies. Ethyl mercaptan (odorant) may react with oxidizers, iron oxide, or water under certain conditions.

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

Agency	Type	Value
OSHA	PEL TWA	1000 ppm / 1800 mg/m3 (as LPG)

ACGIH TLV	TWA	1000 ppm (as alkane C1–C4)
NIOSH	TWA	1000 ppm / 1800 mg/m3
NIOSH IDLH	10% LEL	2100 ppm

Engineering Controls	Explosion-proof general and local exhaust ventilation. Provide eyewash station and safety shower. Use gas detectors for flammable gases where appropriate.
Eye/Face Protection	Chemical splash goggles; face shield where splash or pressurized release risk exists.
Hand Protection	Cryogenic/insulated gloves when liquid contact is possible. Standard chemical-resistant gloves for gas handling.
Body Protection	Chemical-resistant clothing. Cryogenic-rated clothing where liquid contact with liquefied gases is possible.
Respiratory Protection	SCBA or positive-pressure air-supplied respirator required in confined spaces or oxygen-deficient atmospheres. Structural firefighting gear provides limited protection only.
Hygiene	Do not eat, drink, or smoke when handling. Wash hands thoroughly after use.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Colorless gas (liquefied under pressure)
Odor	Naturally odorless; odorant added for distribution
Boiling Point	-43.8°F (-42.1°C) at 1 atm
Freezing Point	-305°F (-187°C)
Flash Point	-156°F (-104°C)
Vapor Pressure	208 psig at 100°F (37.8°C)
Flammability	Extremely flammable gas

LEL / UEL	2.1% / 9.5%
Vapor Density	1.56 (air = 1) — heavier than air
Specific Gravity	1.52 (liquid, air = 1)
Solubility in Water	Slight (0.1–1.0%)
Auto-ignition Temp.	842°F (450°C)
Molecular Formula	C_3H_8 / 44.10 g/mol
UN Number	UN1978

SECTION 10: STABILITY AND REACTIVITY

Reactivity	Stable under normal conditions.
Chemical Stability	Stable under recommended storage conditions.
Hazardous Polymerization	Will not occur.
Conditions to Avoid	Heat, open flames, sparks, sunlight, temperatures above 120°F (49°C), oxygen-enriched atmospheres.
Incompatible Materials	Strong oxidizing agents, chlorine, chlorine dioxide, strong acids, alkalies. Ethyl mercaptan (odorant) may react with oxidizers, iron oxide, or water under certain conditions.
Hazardous Decomp. Products	Carbon monoxide, carbon dioxide, and uncombusted hydrocarbons under fire conditions.

SECTION 11: TOXICOLOGICAL INFORMATION

Routes of Exposure	Inhalation, skin contact, eye contact.
Acute Toxicity	Low acute toxicity by standard routes. High concentrations cause central nervous system depression and asphyxiation.
Skin/Eye Effects	Liquid/cryogenic contact causes frostbite. Vapor may cause mild irritation at high concentrations.
Carcinogenicity	Not listed as a carcinogen by IARC, NTP, or OSHA.
Chronic Effects	No significant chronic effects expected at normal industrial exposure levels.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity	Not classified as environmentally hazardous under GHS criteria.
Persistence/Degradability	Expected to be readily biodegradable. Volatilizes rapidly from water surface.
Bioaccumulative Potential	Low bioaccumulation potential.
Mobility in Soil	Very high mobility — highly volatile, low soil adsorption.
Other Adverse Effects	Displaces oxygen in confined spaces. No significant ozone depletion potential.

SECTION 13: DISPOSAL CONSIDERATIONS

Disposal Methods	Return unused product in cylinders to supplier. Do not puncture, vent, or incinerate sealed cylinders. Comply with federal, state, and local regulations.
Contaminated Packaging	Empty containers may retain product residue. Follow label warnings even after emptying. Take to approved waste handling site.
Waste Code	Determine with user, producer, and licensed waste disposal company per 40 CFR 261.

SECTION 14: TRANSPORT INFORMATION

	DOT (USA)	IATA (Air)	IMDG (Sea)
UN Number	UN1978	UN1978	UN1978
Proper Ship. Name	Propane	Propane	PROPANE
Hazard Class	2.1	2.1	2.1
Packing Group	N/A (gas)	N/A (gas)	N/A (gas)
Marine Pollutant	No	N/A	No
ERG Code	115	115	F-D, S-U

SECTION 15: REGULATORY INFORMATION

OSHA HazCom	Classified as a Hazardous Chemical per 29 CFR 1910.1200.
SARA 311/312	Yes — Flammable gas; Compressed gas. Prop. 65: Combustion products of propane include listed substances.
SARA 313 (TRI)	Not regulated.
TSCA	Listed on TSCA Inventory (active).
California Prop. 65	Chemicals created by the combustion of propane are known to the State of California to cause cancer, birth defects, or other reproductive harm. See www.P65Warnings.ca.gov.
State RTK	Listed in applicable Massachusetts, New Jersey, Pennsylvania, and Rhode Island Right-to-Know substance lists.
International	Listed on TSCA (USA), AICS (Australia), DSL (Canada), NZIoC (New Zealand), PICCS (Philippines).

SECTION 16: OTHER INFORMATION

Issue Date	March 2026
Revision Date	March 2026
Version	1.0
Prepared By	Cannagas Supply

Key Sources	GHS Purple Book (Rev. 9); OSHA HazCom 2012; NFPA 58; NIOSH Pocket Guide; Valero SDS (Propane 309-GHS); AmeriGas SDS (2020); Hub City Propane SDS.
H-Phrase Text	H220: Extremely flammable gas. H280: Contains gas under pressure; may explode if heated. Simple asphyxiant.