



## SAFETY DATA SHEET (SDS)

Material Name: Propane  
SDS No. 6182  
US GHS

### SECTION 1 — COMPANY IDENTIFICATION AND CHEMICAL PRODUCT

**Manufacturer/Supplier:**  
Alpha Propane  
1208 US-93, Victor, MT 59875  
**Office:** (406) 961-7354  
**URL:** www.alphapropane.com

**Tank, Rail, Car, Tank Truck Emergency:**  
PERS 1-800-633-8253  
**Emergency Contact(s):**  
Eric Nelson – 541-954-3110  
Eric Antrim - 406-381-0058  
Shawn Treat – 417-630-8710

**Product Name:** Propane  
**Common Names:** Propane; Liquefied petroleum gas; LP gas; Dimethylmethane  
**Chemical Name:** Dimethylmethane  
**Chemical Formula:** C<sub>3</sub>H<sub>8</sub>  
**Chemical Family:** Paraffin

### SECTION 2 — HAZARDS IDENTIFICATION

#### EMERGENCY OVERVIEW

**DANGER!** Extremely flammable. Compressed gas. At very high concentrations, can displace the normal air and cause suffocation from lack of oxygen. Liquid can cause burns similar to frostbite. Caution: Ethyl mercaptan used as a warning agent may not be entirely effective in all situations. (see section 10) Use combustible gas indicator or similar device if you suspect a leak.

**OSHA HAZARD CLASS:** Based on OSHA definitions, the following ingredients in this product are hazardous. The OSHA physical and health hazard categories are shown below. **Note: Alpha Propane has not conducted specific toxicity tests on this product. Our hazard evaluation is based on information from similar ingredients, technical literature, and/or professional experience.** Propane — Flammable Gas, Compressed Gas, Asphyxiant.

#### POTENTIAL HEALTH EFFECTS

**Routes of Entry:** Inhalation, Dermal.

##### Acute Effects of Overexposure:

**Eyes** — Liquid can cause burns similar to frostbite.

**Skin** — Liquid can cause burns similar to frostbite.

**Inhalation** — At very high concentrations can displace the normal air and cause suffocation from lack of oxygen. Symptoms of lack of oxygen include increase depth and frequency of breathing, dizziness, headache, nausea or loss of consciousness.

**Ingestion** — Liquid can cause burns similar to frostbite.

**Chronic Effects of Overexposure:** None determined

**Conditions Aggravated by Exposure:** People with pre-existing chronic respiratory diseases should avoid exposure to this material

**Carcinogenicity:** NTP: No IARC: No OSHA: No

### SECTION 3 — COMPOSITION AND INFORMATION ON INGREDIENTS

Ingredients	Percentages (by weight)	PEL (OSHA)	TLV (ACGIH)	CAS #
Propane	95-100%	1000 ppm TWA	2500 ppm TWA	74-98-6
Propylene	0-5%	N/D	Simple Asphyxiant	115-07-1

NOTE: Ethyl Mercaptan added as an odorant

(TWA) — Time weighted average is the employee's average airborne exposure in any 8-hour work shift of a 40-hour work week, which shall not be exceeded.

(STEL) — Short term exposure limit is the employee's 15-minute time weighted average exposure, which shall not be exceeded at any time during a work day unless another time limit is specified.

### SECTION 4 — FIRST AID MEASURES

**Eye Contact** — If liquid propane contacts the eye, flush thoroughly with water for at least 15 minutes, occasionally lifting the upper and lower lids, until no evidence of chemical remains. Get medical attention as soon as possible.

**Skin Contact** — Frozen tissue should be flushed with plenty of tepid water. **Do not use hot water.** Cryogenic (low temperature) burns that result in blistering or deeper tissue freezing should be promptly treated by a physician.

**Inhalation** — Move person to fresh air. If large amounts have been inhaled, keep victim warm and get medical attention. Apply artificial respiration if not breathing.

### SECTION 5 — FIRE-FIGHTING MEASURES

**Flash point:** -156°F **Auto ignition temp:** 874°F **Flammable limits in air % by volume:** Lower 2.1 Upper 9.5

**Extinguishing media:** Do not extinguish gas fire unless the gas flow can be stopped. Small fires: use a dry chemical and Carbon Dioxide (CO<sub>2</sub>).

**Special fire fighting procedures:** Gas fires should not be extinguished unless the gas flow can be stopped immediately.

Keep unnecessary people away; isolate hazard area and deny entry. Stay upwind, out of low areas, and ventilate closed spaces before entering. Self-contained breathing apparatus (SCBA) and structural firefighters' protective clothing will provide limited protection. Isolate for 1/2 mile in all directions if tank, rail car or tank truck is involved in fire. Call Professional Emergency Resource Services (PERS) at 1-800-633-8253 as soon as possible, especially if there is no local hazardous materials team available. Shut off gas at 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 over-heating, flash-backs, or explosions. Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank. ALWAYS stay away from tanks engulfed in fire. For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn.

**Unusual fire and explosion hazards:** Vapors are heavier than air and may travel along the ground to a source of ignition (pilot light, heater, electric motor) some distance away. Withdraw immediately in case of rising sound from venting safety devices or any discoloration of tank due to fire.

<b>Hazard ratings:</b>	<b>NFPA 704:</b>	Health <u>2</u>	Fire <u>4</u>	Reactivity <u>0</u>
	<b>HMIS:</b>	Health <u>2</u>	Fire <u>4</u>	Reactivity <u>0</u>

### SECTION 6 — ACCIDENTAL RELEASE MEASURES

**Steps to take if material is release or spilled:** REMOVE ALL SOURCES OF IGNITION. Notify emergency response personnel as appropriate. Keep unnecessary people away; isolate hazard area and deny entry. Vapors can be dispersed with sustained water spray. NOTE: Review Section 5 — FIRE-FIGHTING MEASURES before proceeding with clean up. Use appropriate personal protective equipment during emergency response.

## SECTION 7 — HANDLING AND STORAGE

**Handling and storing:** Consult the U.S. Department of Transportation regulations on the shipping of petroleum gases. If upon initial receipt inspection a cylinder is found to be in poor condition, contact the supplier. The most common hazard is leakage due to faulty pressure control regulators. Large pressure build-up can result in explosive decompression at the cylinder head, causing the cylinder to rocket like a missile. Prevent entrapment of liquid in closed system. Use check valve to prevent back-flow into storage container. Chain cylinders when not in use. Cylinder storage should be segregated from oxidizers such as oxygen, chlorine, etc. and away from heavy traffic areas to prevent knocking over or damage of falling objects. Valve caps should remain on cylinders.

## SECTION 8 — EXPOSURE CONTROL - PERSONAL PROTECTION

**Engineering controls** — Local exhaust and general ventilation may both be necessary in work area to prevent accumulation of explosive mixtures. Provide special ventilation in sumps and confined spaces. If mechanical ventilation is used, electrical equipment must meet National Electrical Code requirements.

**Respiratory equipment** — Personnel should never enter an area of high concentration without proper respiratory protection. Provide NIOSH-approved air-supplied respirator or self-contained breathing equipment for emergency or non-routine situations where the level is excessive.

**Eye protection** — Use face shield or chemical type goggles where contact with material may occur such as when changing valves, hoses, etc.

**Protective clothing** — Use protective clothing and/or gloves when contact with liquid propane is possible. Other (safety showers, eye wash stations, etc.): Emergency eye wash fountains and safety showers for first aid treatment of potential freeze burns should be available in the vicinity of any significant exposure from compressed gas release.



## SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

**Appearance:** Colorless gas (liquid under pressure)

**Boiling point:** 760 mmHg @ -44°F

**Vapor pressure:** 190 psia @ 100°F

**Soluble in water:** Very slightly soluble

**Odor:** If odorized, will have rotten egg odor, otherwise odorless.

**Evaporation rate (ether=1):** N/A

**Specific gravity (water=1):** 0.5

**Vapor density (air=1):** 1.5

**Signal Word:** Danger

**GHS Label Elements, Symbols:**



Flammable



Compressed Gas



Irritant

## SECTION 10 — STABILITY AND REACTIVITY

**Stability:** Stable X (At normal temperature and storage conditions) Unstable     

**Incompatibility: Conditions to avoid:** Heat, sparks, flame, build-up of static electricity, and other sources of ignition.

Note: Ethyl mercaptan might, under certain conditions (when oxygen, water, iron oxide or other oxidizers are present in containers or piping) react with oxidizers, which diminish or eliminate entirely its distinct smell, reducing the warning properties of the ethyl mercaptan.

**Materials to avoid:** Strong acids, alkalies and oxidizers such as chlorine (gas or liquid) and oxygen.

**Hazardous decomposition products:** Normal combustion produces carbon dioxide; incomplete combustion can produce carbon monoxide.

**Hazardous polymerization:** Has not been reported to occur.

## SECTION 11 — TOXICOLOGY INFORMATION

**Note:** Alpha Propane has not conducted specific toxicity tests on this product.

## SECTION 12 — ECOLOGICAL INFORMATION

**Note:** Alpha Propane has not conducted specific ecological tests on this product.

## SECTION 13 — DISPOSAL CONSIDERATION

**Waste disposal procedures:** 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 being ignited. When it becomes necessary to dispose of these gases, it is preferable to do so as a vapor. These gases may be used as an auxiliary fuel or disposed of by burning in a properly designed flare or incinerator. Venting of the gases to the atmosphere should be avoided. Treatment, storage, transportation and disposal must be in accordance with applicable federal, state and local regulations.

## SECTION 14 — TRANSPORTATION

**DOT proper shipping name:** Propane

**DOT identification number:** UN 1075

**DOT emergency response guide number:** 115 (Formerly #22)

**DOT hazard class:** 2.1

**DOT label, placard:** Flammable Gas



## SECTION 15 — REGULATORY INFORMATION

This product may contain the following toxic chemicals subject to the reporting requirements of SARA Section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 and of 40 CFR 372.

**Cas Number:** 115-07-1

**Chemical Name:** Propylene

**Percent By Weight:** 0 - 5%

**SARA section 311-312 hazard categories (40 CFR 370.2):** Fire: Yes Sudden pressure release: Yes Reactive: No Acute: Yes Chronic: No

## SECTION 16 — OTHER INFORMATION

**Issued by:** Eric Nelson, Region Vice President, and  
Shawn Treat, Vice President of Safety and Compliance

**Reason/Date of Issue:** Alpha Propane Duty To Warn/Safety

**Date:** July 2024

**NFPA® Hazard Rating:**

Health 2  
Fire 4  
Reactivity 0



The information contained in this SDS Relates only to the specific material identified. It does not cover use of that material in combination with any other material or in any particular process. In compliance with 29 C.F.R. 1910.1200(g), Canyon State Propane has prepared this SDS in segments, with the intent that those segments be read together as a whole without textual omissions or alterations. Canyon State Propane believes the information contained herein to be accurate, but makes no representation, guarantee, or warranty, express or implied, about the accuracy, reliability, or completeness of the information or about the fitness of contents herein for either general or particular purposes. Persons reviewing this SDS should make their own determination as to the material's suitability and completeness for use in their particular applications.