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Section 1. Identification

Product identifier

Product Identity Propane

Other means of identification LPG (Liquefied Petroleum Gas); LP-Gas.

Relevant identified uses of the substance or mixture and uses advised against

Propane is commonly used as a fuel for heating, cooking, automobiles, forklift trucks, crop drying and welding and cutting operations. Propane is used in industry as a refrigerant, solvent and

as a chemical feedstock.

Details of the supplier of the safety data sheet

Company Name Superior Propane

700 Jamieson Pkwy

Cambridge, ON N3C 4N6

Emergency

24 hour Emergency Telephone No. CANUTEC 1-888-CAN-UTEC (226-8832) or 613-996-

6666 or *666 on a cellular phone

Customer Service: 1-877-873-7467

Section 2. Hazard(s) identification

Classification of the substance or mixture under US OSHA's Hazard Communication Standard (1910.1200) revised 2024 and Canadian Hazardous Products Regulations (SOR/2015-17) (GHS revision 7)

Flammable Gas, category 1;H220 Extremely flammable gas.

Liquified Gas;H280 Contains gas under pressure; may explode if heated.

Simple Asphyxiant May displace oxygen and cause rapid suffocation.

Label elements



Danger

H220 Extremely flammable gas.

H280 Contains gas under pressure; may explode if heated.

May displace oxygen and cause rapid suffocation.

[Prevention]

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



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[Response]

P377 Leaking gas fire - do not extinguish unless leak can be stopped safely.

P381 In case of leakage, eliminate all ignition sources.

[Storage]

P403 Store in a well ventilated place.

P410+403 Protect from sunlight. Store in a well ventilated place.

[Disposal]

No GHS disposal statements

Other hazards

This product contains no PBT/vPvB chemicals.

This product contains no endocrine disrupting chemicals.

May displace oxygen and cause rapid suffocation.

Section 3. Composition/information on ingredients

This product contains the following substances that present a hazard within the meaning of US OSHA's Hazard Communication Standard (1910.1200) revised 2024 and Canadian Hazardous Products Regulations (SOR/2015-17) (GHS revision 7)

Ingredient/Chemical Designations	Weight %	GHS Classification	Notes
Propane CAS Number: 74-98-6 Synonyms: No available information	80 - 100	Flammable Gas, category 1;H220 Liquified Gas;H280 Simple Asphyxiant	No data available
Ethane CAS Number: 74-84-0 Synonyms: No available information	1 - 5	Flammable Gas, category 1;H220 Gas under pressure;H280	No data available
Propene CAS Number: 115-07-1 Synonyms: PROPYLENE	1 - 5	Flammable Gas, category 1;H220 Gas under pressure;H280	No data available
Butane CAS Number: 106-97-8 Synonyms: No available information	0.5 - 1.5	Flammable Gas, category 1;H220 Liquified Gas;H280 Simple Asphyxiant	No data available

The actual concentration or concentration range is withheld as a trade secret.

Section 4. First aid measures

Description of first aid measures

General In all cases of doubt, or when symptoms persist, seek medical attention.

Never give anything by mouth to an unconscious person.

Inhalation Remove to fresh air, keep patient warm and at rest. If breathing is irregular or stopped, give

artificial respiration. If unconscious, place in the recovery position and obtain immediate

medical attention. Give nothing by mouth.

Eyes Irrigate copiously with clean water for at least 15 minutes, holding the eyelids apart and

seek medical attention.

^{*}PBT/vPvB - PBT-substance or vPvB-substance.

The full texts of the phrases are shown in Section 16.



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Skin Remove contaminated clothing. Wash skin thoroughly with soap and water or use a

recognized skin cleanser.

Ingestion If swallowed obtain immediate medical attention. Keep at rest. Do NOT induce vomiting.

Most important symptoms and effects, both acute and delayed

Overview No specific symptom data available.

Treat symptomatically.

Section 5. Fire-fighting measures

Extinguishing media

Recommended extinguishing media; alcohol resistant foam, CO², powder, water spray.

Unsuitable extinguishing media: Do not use; water jet.

Special hazards arising from the substance or mixture

Hazardous decomposition: Oxides of carbon

Keep away from heat, sparks, open flames, and other ignition sources - No smoking.

Advice for fire-fighters

As with all fires, wear positive pressure, self-contained breathing apparatus, (SCBA) with a full face piece and protective clothing. Persons without respiratory protection should leave area. Wear SCBA during clean-up immediately after fire. No smoking.

Extremely flammable gas. Contains gas under pressure; may explode if heated. Will be easily ignited by heat, sparks or flames. Will form explosive mixtures with air. Vapors from liquefied gas are initially heavier than air and spread along ground. Vapors may travel to source of ignition and flash back. Cylinders exposed to fire may vent and release flammable gas through pressure relief devices. Containers may explode when heated. Ruptured cylinders may rocket. DO NOT EXTINGUISH A LEAKING GAS FIRE UNLESS LEAK CAN BE STOPPED.

If tank, rail car or tank truck is involved in a fire, ISOLATE for 1600 meters (1 mile) in all directions; also, consider initial evacuation for 1600 meters (1 mile) in all directions.

Fire involving Tanks: Fight fire from maximum distance or use unmanned hose holders or monitor nozzles. Cool containers with flooding quantities of water until well after fire is out. Do not direct water at source of leak or safety devices; icing may occur. 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.

Leaking gas fire: Do not extinguish, unless leak can be stopped safely. Eliminate all ignition sources if safe to do so. Vapors may cause dizziness or asphyxiation without warning. Some may be irritating if inhaled at high concentrations. Contact with gas or liquefied gas may cause burns, severe injury and/or frostbite. Fire may produce irritating and/or toxic gases. Wear positive pressure self-contained breathing apparatus (SCBA). Structural firefighters' protective clothing will only provide limited protection. Always wear thermal protective clothing when handling refrigerated/cryogenic liquids.

ERG Guide No. 115

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

As an immediate precautionary measure, isolate spill or leak area for at least 100 meters (330 feet) in all directions. Keep unauthorized personnel away. Stay upwind. Many gases are heavier than air and will spread along ground and



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collect in low or confined areas (sewers, basements, tanks). Keep out of low areas. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). All equipment used when handling the product must be grounded.

Environmental precautions

Do not allow spills to enter drains or waterways.

Use good personal hygiene practices. Wash hands before eating, drinking, smoking, or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

Methods and material for containment and cleaning up

Stop leak if you can do it without risk. If possible, turn leaking containers so that gas escapes rather than liquid. Use water spray to reduce vapors or divert vapor cloud drift. Avoid allowing water runoff to contact spilled material. Do not direct water at spill or source of leak.

Prevent spreading of vapors through sewers, ventilation systems and confined areas. Isolate area until gas has dispersed. CAUTION: When in contact with refrigerated/cryogenic liquids, many materials become brittle and are likely to break without warning.

Section 7. Handling and storage

Precautions for safe handling

Handle containers carefully to prevent damage and spillage.

See section 2 for further details. - [Prevention]

Conditions for safe storage, including any incompatibilities

Store in a well-ventilated place. Protect from sunlight. Store away from incompatible materials. See Section 10 for information on Incompatible Materials. Keep out of the reach of children.

Incompatible materials: Oxidizers.

See section 2 for further details. - [Storage]

Specific end use(s)

No data available.

Section 8. Exposure controls / personal protection

Control parameters

Exposure

CAS No.	Ingredient	Source	Value	
74-84-0	Ethane	ACGIH	(D) Simple Asphyxiant - (EX) Explosion hazard	
		OSHA	No Established Limit	
		NIOSH	No Established Limit	
		Alberta	1000 ppm TWA	
		British Columbia	No Established Limit	
		Manitoba	See Appendix F: Minimal Oxygen Content, explosion hazard	
		New Brunswick	No Established Limit	



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		Newfoundland and Labrador	See Appendix F: Minimal Oxygen Content, explosion hazard
			See Appendix F: Minimal Oxygen Content, explosion hazard
		Northwest Territories	1000 ppm TWA 1250 ppm STEL
		Nunavut	1000 ppm TWA 1250 ppm STEL
		Ontario	see Appendix F: Minimal Oxygen Content
		Prince Edward Island	See Appendix F: Minimal Oxygen Content, explosion hazard
		Quebec	No Established Limit
		Saskatchewan	1000 ppm TWA 1250 ppm STEL
		Yukon	No Established Limit
74-98-6	Propane	ACGIH	(D) Simple Asphyxiant - (EX) Explosion hazard
		OSHA	1000 ppm, 1800 mg/m ³
		NIOSH	TWA 1000 ppm (1800 mg/m³)
		Alberta	1000 ppm TWA
		British Columbia	No Established Limit
		Manitoba	See Appendix F: Minimal Oxygen Content, explosion hazard
		New Brunswick	No Established Limit
		Newfoundland and Labrador	See Appendix F: Minimal Oxygen Content, explosion hazard
		Nova Scotia	See Appendix F: Minimal Oxygen Content, explosion hazard
		Northwest Territories	1000 ppm TWA 1250 ppm STEL
		Nunavut	1000 ppm TWA 1250 ppm STEL
		Ontario	see Appendix F: Minimal Oxygen Content
		Prince Edward Island	See Appendix F: Minimal Oxygen Content, explosion hazard
		Quebec	1000 ppm TWAEV; 1800 mg/m³ TWAEV
		Saskatchewan	1000 ppm TWA 1250 ppm STEL
		Yukon	No Established Limit
106-97-8	Butane	ACGIH	1000 ppm (EX) Explosion hazard
		OSHA	No Established Limit
		NIOSH	TWA 800 ppm (1900 mg/m³)
		Alberta	1000 ppm TWA
		British Columbia	750 ppm STEL
		Manitoba	1000 ppm STEL (explosion hazard, listed under Butane, isomers)
		New Brunswick	800 ppm TWA; 1900 mg/m³ TWA
		Newfoundland and Labrador	1000 ppm STEL (explosion hazard, listed under Butane, isomers)
		Nova Scotia	1000 ppm STEL (explosion hazard, listed under Butane, isomers)
		Northwest Territories	1000 ppm TWA (listed under Butane, all isomers) 1250 ppm STEL (listed under Butane, all isomers)



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		Nunavut	1000 ppm TWA (listed under Butane, all isomers) 1250 ppm STEL (listed under Butane, all isomers)
		Ontario	1000 ppm STEL (listed under Butane, all isomers)
		Prince Edward Island	1000 ppm STEL (explosion hazard, listed under Butane, isomers)
		Quebec	800 ppm TWAEV; 1900 mg/m³ TWAEV
			1000 ppm TWA (listed under Butane, all isomers) 1250 ppm STEL (listed under Butane, all isomers)
		Yukon	600 ppm TWA; 1400 mg/m³ TWA 750 ppm STEL; 1600 mg/m³ STEL
15-07-1	Propene	ACGIH	500 ppm
		OSHA	No Established Limit
		NIOSH	No Established Limit
		Alberta	500 ppm TWA; 860 mg/m³ TWA
	British Columbia	500 ppm TWA	
		Manitoba	500 ppm TWA
		New Brunswick	No Established Limit
		Newfoundland and Labrador	500 ppm TWA
		Nova Scotia	500 ppm TWA
		Northwest Territories	No Established Limit
		Nunavut	No Established Limit
		Ontario	500 ppm TWA
	Prince Edward Island	500 ppm TWA	
		Quebec	No Established Limit
		Saskatchewan	No Established Limit
		Yukon	No Established Limit

Exposure controls









Respiratory

If engineering controls and ventilation are not sufficient to control exposure to below the allowable limits then an appropriate NIOSH/MSHA approved air-purifying respirator that meets the requirements of CSA Standard CAN/CSA-Z94.4-11, or self-contained breathing apparatus must be used. Supplied air breathing apparatus must be used when oxygen concentrations are low or if airborne concentrations exceed the limits of the air-purifying respirators.

Eyes

Wear cold insulating face shield and eye protection. Use equipment for eye protection that meets the standards referenced by CSA Standard CAN/CSA-Z94.3-92 and OSHA regulations in 29 CFR 1910.133 for Personal Protective Equipment.



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Skin Wear protective clothing. Wear protective gloves. Wear cold insulating gloves. Consult

manufacturer specifications for further information.

Engineering Controls Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapour, gas,

etc.) below recommended exposure limits.

Other Work Practices Handle according to established industrial hygiene and safety practices. Consult a

> competent industrial hygienist to determine hazard potential and/or the PPE manufacturers to ensure adequate protection. Use good personal hygiene practices. Wash hands before eating, drinking, smoking, or using toilet. Promptly remove soiled clothing and wash

thoroughly before reuse.

See section 2 for further details.

Section 9. Physical and chemical properties

Information on basic physical and chemical properties

Physical State Gas

Color Colourless

Odourless, unless odourized with ethyl mercaptan Odor

(skunky odour, similar to boiling cabbage).

Melting point / freezing point -188 °C (-306.4 °F) Initial boiling point and boiling range -42.2 °C (-44 °F)

Flammability (solid, gas) Gas

Upper/lower flammability or explosive limits Lower Explosive Limit: 2.1% (Propane) **Upper Explosive Limit:** 9.5% (Propane)

Flash Point -103.4 °C (-154.1 °F) (Closed Cup)

Auto-ignition temperature 432 °C (809.6 °F) **Decomposition temperature** Not Available Not Available pН

Viscosity (cSt) Not Available

Solubility in Water Slight, 6.1% by volume @ 17.8°C (64 °F)

Partition coefficient n-octanol/water (Log Kow) Not Available 1435 kPa (maximum) at 37.8 °C (100 °F) Vapor pressure (Pa)

Relative Density 0.51 (Water = 1)**Vapor Density** 1.52 (Air = 1)Evaporation rate (Ether = 1) Rapid.

VOC Content

Other information

No other relevant information.

Not Available



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Section 10. Stability and reactivity

Reactivity

Hazardous Polymerization will not occur.

Chemical stability

Stable under normal circumstances.

Possibility of hazardous reactions

No data available.

Conditions to avoid

Contact with incompatible materials. Sources of ignition. Exposure to heat.

Incompatible materials

Oxidizers.

Hazardous decomposition products

Oxides of carbon

Section 11. Toxicological information

Acute toxicity

Note: When no route specific LD50 data is available for an acute toxin, the converted acute toxicity point estimate was used in the calculation of the product's ATE (Acute Toxicity Estimate).

Ingredient	Oral LD50, mg/kg	Skin LD50, mg/kg	Inhalation Vapor LC50, mg/L/4hr	Inhalation Dust/Mist LC50, mg/L/4hr	Inhalation Gas LC50, ppm
Propane - (74-98-6)	No data available.	No data available.	658.00, Rat - Category: NA	No data available.	No data available.
Ethane - (74-84-0)	No data available.	No data available.	No data available.	No data available.	No data available.
Propene - (115-07-1)	No data available.	No data available.	No data available.	No data available.	No data available.
Butane - (106-97-8)	No data available.	No data available.	658.00, Rat - Category: NA	No data available.	No data available.

Carcinogen Data

CAS No.	Ingredient	Source	Value		
74-84-0	Ethane	IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;		
		ACGIH	No Established Limit		
74-98-6	Propane	IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;		
		ACGIH	No Established Limit		
106-97-8	Butane	IARC Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;			
		ACGIH	No Established Limit		
115-07-1 Propene		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: Yes; Group 4: No;		
		ACGIH	A4		



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Classification	Category	Hazard Description
Acute toxicity (oral)		Not Applicable
Acute toxicity (dermal)		Not Applicable
Acute toxicity (inhalation)		Not Applicable
Skin corrosion/irritation		Not Applicable
Serious eye damage/irritation		Not Applicable
Respiratory sensitization		Not Applicable
Skin sensitization		Not Applicable
Germ cell mutagenicity		Not Applicable
Carcinogenicity		Not Applicable
Reproductive toxicity		Not Applicable
STOT-single exposure		Not Applicable
STOT-repeated exposure		Not Applicable
Aspiration hazard		Not Applicable

Possible routes of entry: No data available.

Symptoms and effects, both acute and delayed:

No specific symptom data available.

Treat symptomatically.

Section 12. Ecological information

Toxicity

No additional information provided for this product. See Section 3 for chemical specific data.

Aquatic Ecotoxicity

Ingredient	96 hr LC50 fish, mg/L	48 hr EC50 crustacea, mg/L	ErC50 algae, mg/L
Propane - (74-98-6)	49.90, Fish	69.43, Daphnia sp	19.37, Algae
Ethane - (74-84-0)	No data available.	No data available.	No data available.
Propene - (115-07-1)	No data available.	No data available.	No data available.
Butane - (106-97-8)	49.90, Fish (Piscis)	69.43, Daphnia sp	19.37, Algae

Persistence and degradability

There is no data available on the preparation itself.

Bioaccumulative potential

Not Available

Mobility in soil

No data available.

Results of PBT and vPvB assessment

This product contains no PBT/vPvB chemicals.



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Other adverse effects

No data available.

Section 13. Disposal considerations

Waste treatment methods

Waste should not be released to sewers. Observe all federal, state, and local regulations when disposing of this substance.

Section 14. Transport information

Domestic Surface Transportation IMO / IMDG (Ocean ICAO/IATA **Transportation**) **UN** number UN1075 UN1075 UN1075 UN proper UN1075, Petroleum gases, liquefied Petroleum gases, liquefied or Petroleum gases, liquefied shipping name or Liquefied petroleum gas, 2.1, Liquefied petroleum gas or Liquefied petroleum gas **TDG Hazard Class: 2.1 Transport IMDG:** 2.1 Air Class: 2.1 hazard class(es) Sub Class: Not Applicable Sub Class: Not Applicable Sub Class: Not Applicable Packing group Not Applicable Not Applicable Not Applicable

Environmental hazards

Marine Pollutant: No;

Special precautions for user

Not Applicable

Section 15. Regulatory information

Regulatory Overview The regulatory data in Section 15 is not intended to be all-inclusive, only selected regulations are represented.

This product has been classified in accordance with US OSHA's Hazard Communication Standard (1910.1200) revised 2024 and Canadian Hazardous Products Regulations (SOR/2015-17 amended 2022-12-15) (GHS revision 7) and the SDS contains all of the information required by those regulations.

Toxic Substance Control Act (TSCA)

Butane

Ethane

Propane

Propene

EPCRA 302 Extremely Hazardous:

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.



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EPCRA 313 Toxic Chemicals:

Propene

Canadian Domestic Substance List (DSL):

Butane

Ethane

Propane

Propene

Canadian Non-Domestic Substance List (NDSL):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Carcinogens (>0.0%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Developmental Toxins (>0.0%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Female Repro Toxins (>0.0%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Male Repro Toxins (>0.0%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 Label Warning:

This product contains no chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

Section 16. Other information

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The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein. We accept no responsibility and disclaim all liability for any harmful effects which may be caused by exposure to our products. Customers/users of this product must comply with all applicable health and safety laws, regulations, and orders.

The full text of the phrases appearing in section 3 is:

H220 Extremely flammable gas.

H280 Contains gas under pressure; may explode if heated.

Disclaimer:

The information contained in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. It is the user's responsibility to satisfy oneself as to the suitability and completeness of this information for their own particular use.

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