Propylene

Safety Data Sheet

According to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012 and the Hazardous Products Regulations (HPR) WHMIS 2015

Issue date: 2024-09-23
Revision date: 2024-09-23
Version: 1.0

SECTION 1: Identification

1.1. Identification

Product form	:	Substance
Substance name	:	Propylene
CAS-No.	:	68476-85-7

1.2. Recommended use and restrictions on use

Recommended use	:	Fuel
Restrictions on use	:	None known

1.3. Supplier

Manufacturer
NGL Supply Co., Ltd.
1420, 225 - 6th Avenue SW
Calgary, Alberta - Canada T2P 1N2
T 403-265-1977

Distributor
NGL Supply Terminal Company
720 South Colorado Blvd. Suit 720N
Denver, CO 80246 - USA
T 303-839-1806

1.4. Emergency telephone number

Emergency number	:	CHEMTREC 1 (800) 424-9300; ERAC Emergency Response 1-800-265-0212

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS classification

Flam. Gas 1
Press. Gas (Liq.)
Simple Asphy

2.2. GHS Label elements, including precautionary statements

GHS labelling

Hazard pictograms (GHS) :

Signal word (GHS)	:	Danger
Hazard statements (GHS)	:	Extremely flammable gas. Contains gas under pressure; may explode if heated. May displace oxygen and cause rapid suffocation
Precautionary statements (GHS)	:	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Leaking gas fire: Do not extinguish, unless leak can be stopped safely. Eliminate all ignition sources if safe to do so. Store in a well-ventilated place. Protect from sunlight. Store in a well-ventilated place.

2.3. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity

Not applicable

SECTION 3: Composition/information on ingredients

3.1. Substances

Name : Propylene

Name	Product identifier	%
Petroleum gases, liquefied	CAS-No.: 68476-85-7	<= 100

3.2. Mixtures

Not applicable

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures after inhalation : If inhaled and if breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Give oxygen or artificial respiration if necessary. Call a POISON CENTER/doctor if you feel unwell.

First-aid measures after skin contact : If skin irritation occurs: Wash skin with plenty of water. Obtain medical attention if irritation persists.

First-aid measures after eye contact : IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

First-aid measures after ingestion : Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Get medical advice/attention if you feel unwell.

4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects after inhalation : May cause irritation to the respiratory tract. Vapours are heavier than air and can cause suffocation by reducing oxygen available for breathing. Symptoms of oxygen deficiency include respiratory difficulty, headache, dizziness, nausea, unconsciousness or death.

Symptoms/effects after skin contact : Not a normal route of exposure. May cause frostbite burns to the skin.

Symptoms/effects after eye contact : Not a normal route of exposure. Causes frostbite burns to the eyes.

Symptoms/effects after ingestion : Not a normal route of exposure.

4.3. Immediate medical attention and special treatment, if necessary

Symptoms may be delayed. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Water fog. Foam. Carbon dioxide (CO2). Dry chemical. Cool closed containers exposed to fire with water spray.

Unsuitable extinguishing media : Do not use water jet.

5.2. Specific hazards arising from the chemical

Fire hazard : Extremely flammable gas. Products of combustion may include, and are not limited to: oxides of carbon.

Explosion hazard : May form flammable/explosive vapour-air mixture. Ruptured cylinders may rocket.

5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions : Leaking gas fire: Do not extinguish, unless leak can be stopped safely. Eliminate all ignition sources if safe to do so. Move containers away from the fire area if this can be done without risk. Cool closed containers exposed to fire with water spray.

Protection during firefighting : Containers may explode when heated. Use water spray to keep fire-exposed containers cool. For large fires, flood fire area with large quantities of water, while knocking down vapours with water fog. Vapours may be heavier than air and may travel along the ground to a distant ignition source and flash back. Keep upwind of fire. Wear full fire fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA).

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel. Use special care to avoid static electric charges. Eliminate every possible source of ignition.

6.1.1. For non-emergency personnel

No additional information available

6.1.2. For emergency responders

No additional information available

6.2. Environmental precautions

Many gases are heavier than air and will spread along ground and collect in low or confined areas (sewers, basements, tanks). Prevent entry to sewers and public waters.

6.3. Methods and material for containment and cleaning up

For containment : Stop leak if safe to do so. Remove all sources of ignition. Absorb and/or contain spill with inert material (sand, vermiculite or other appropriate material), then place in suitable container. Do not flush into surface water or sewer system. Wear recommended personal protective equipment.

Methods for cleaning up : Sweep or shovel spills into appropriate container for disposal. Provide ventilation.

6.4. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection".

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed : Handle empty containers with care because residual vapours are flammable.

Precautions for safe handling : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Avoid contact with skin and eyes. Avoid breathing gas. Do not swallow. Handle and open container with care. When using do not eat, drink or smoke. Use only outdoors or in a well-ventilated area. Vapours are heavier than air and may travel considerable distance to an ignition source and flash back to source of vapours.

Hygiene measures : Wash contaminated clothing before reuse. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Proper grounding procedures to avoid static electricity should be followed.

Storage conditions : Keep out of the reach of children. Keep container tightly closed. Store in a dry, cool and well-ventilated place. Store away from direct sunlight or other heat sources. Protect containers from physical damage.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Propylene
No additional information available

Petroleum gases, liquefied (68476-85-7)	
USA - ACGIH - Occupational Exposure Limits	
ACGIH chemical category	Simple asphyxiant See Appendix F: Minimal Oxygen Content
USA - OSHA - Occupational Exposure Limits	
OSHA PEL TWA	1800 mg/m³
OSHA PEL TWA	1000 ppm
USA - IDLH - Occupational Exposure Limits	
IDLH	2000 ppm
USA - NIOSH - Occupational Exposure Limits	
NIOSH REL TWA	1800 mg/m³
NIOSH REL TWA	1000 ppm

8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station. Oxygen detectors should be used when asphyxiating gases may be released.

Environmental exposure controls : Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Hand protection:

Wear suitable gloves. Consult glove manufacturer's product information on material suitability and material thickness.

Eye protection:

Safety glasses or goggles are recommended when using product.

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. Self contained breathing apparatus (SCBA) or positive pressure airline with mask are to be used in oxygen-deficient atmospheres. SDSs cannot provide detailed and complete respiratory protection guidelines. Selection of respiratory protection must be done by a qualified person who has assessed the work environment.

Other information:

Handle in accordance with good industrial hygiene and safety procedures. Do not eat, drink or smoke when using this product.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Gas

Colour	:	Clear,Colourless
Odour	:	No data available
Odour threshold	:	No data available
pH	:	No data available
Melting point	:	No data available
Freezing point	:	No data available
Boiling point	:	No data available
Flash point	:	< -17.7 °C / -<0°F
Relative evaporation rate (butylacetate=1)	:	No data available
Flammability	:	Extremely flammable gas.
Vapour pressure	:	> 30 psia @ 100 °F / 37.8 °F
Relative vapour density at 20°C / 68 °F	:	> 1
Relative density	:	No data available
Solubility	:	No data available
Partition coefficient n-octanol/water	:	No data available
Auto-ignition temperature	:	No data available
Decomposition temperature	:	No data available
Viscosity, kinematic	:	No data available
Viscosity, dynamic	:	No data available
Explosive limits	:	Lower explosion limit: 1 vol % Upper explosion limit: 13 vol %
Explosive properties	:	No data available
Oxidising properties	:	No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No dangerous reactions known under normal conditions of use.

10.2. Chemical stability

Stable under normal conditions. Extremely flammable gas. Contains gas under pressure; may explode if heated.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Heat. Sources of ignition. Direct sunlight. Incompatible materials.

10.5. Incompatible materials

Strong oxidizers. Alkalis. Nickel carbonyl.

10.6. Hazardous decomposition products

May include, and are not limited to: oxides of carbon.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	:	Not classified.
Acute toxicity (dermal)	:	Not classified.

Acute toxicity (inhalation) : Not classified.

Petroleum gases, liquefied (68476-85-7)	
LC50 inhalation rat	658 mg/l/4h (Based on butane, isobutane)
ATE CA (vapours)	658 mg/l/4h
ATE CA (dust,mist)	658 mg/l/4h

Skin corrosion/irritation : Not classified.
Serious eye damage/irritation : Not classified.
Respiratory or skin sensitisation : Not classified.
Germ cell mutagenicity : Not classified.
Carcinogenicity : Not classified.
Reproductive toxicity : Not classified.
STOT-single exposure : Not classified.
STOT-repeated exposure : Not classified.

Petroleum gases, liquefied (68476-85-7)	
LOAEC (inhalation, rat, gas, 90 days)	12000 ppm Animal: rat, Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test), Guideline: other:OPPTS 870.3650 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)

Aspiration hazard : Not applicable
Symptoms/effects after inhalation : May cause irritation to the respiratory tract. Vapours are heavier than air and can cause suffocation by reducing oxygen available for breathing. Symptoms of oxygen deficiency include respiratory difficulty, headache, dizziness, nausea, unconsciousness or death.
Symptoms/effects after skin contact : Not a normal route of exposure. May cause frostbite burns to the skin.
Symptoms/effects after eye contact : Not a normal route of exposure. Causes frostbite burns to the eyes.
Symptoms/effects after ingestion : Not a normal route of exposure.
Other information : Likely routes of exposure: ingestion, inhalation, skin and eye.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : May cause long-term adverse effects in the aquatic environment.

12.2. Persistence and degradability

Propylene	
Persistence and degradability	Not established.

12.3. Bioaccumulative potential

Propylene	
Bioaccumulative potential	Not established.

Petroleum gases, liquefied (68476-85-7)	
Partition coefficient n-octanol/water	≤ 2.8

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Effect on global warming : No known effects from this product.
Other information : No other effects known.

SECTION 13: Disposal considerations

13.1. Disposal methods

Product/Packaging disposal recommendations : Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.
Additional information : Handle empty containers with care because residual vapours are flammable.

SECTION 14: Transport information

In accordance with DOT / TDG

14.1. UN number

UN-No.(DOT) : UN1075
UN-No. (TDG) : UN1075

14.2. UN proper shipping name

Proper Shipping Name (DOT) : Liquefied petroleum gas
Proper Shipping Name (TDG) : LIQUEFIED PETROLEUM GASES

14.3. Transport hazard class(es)

DOT
Transport hazard class(es) (DOT) : 2.1
Hazard labels (DOT) : 2.1

TDG
Transport hazard class(es) (TDG) : 2.1
Hazard labels (TDG) : 2.1

14.4. Packing group

Packing group (DOT) : Not applicable
Packing group (TDG) : Not applicable

14.5. Environmental hazards

Other information : No supplementary information available.

14.6. Special precautions for user

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

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1 Federal regulations

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory.

All components of this product are listed, or excluded from listing, on the Canadian DSL (Domestic Substances List) and NDSL (Non-Domestic Substances List) inventories.

15.2. International regulations

No additional information available

15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

SECTION 16: Other information

According to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012 and the Hazardous Products Regulations (HPR) WHMIS 2015

Revision date : 09/23/2024

Other information : None.

Prepared by : Nexreg Compliance Inc.
www.Nexreg.com

Full text of hazard classes and H-statements	
Flam. Gas 1	Flammable gases, Category 1
Press. Gas (Liq.)	Gases under pressure : Liquefied gas
Simple Asphy	Simple Asphyxiant

SDS HazCom 2012 - WHMIS 2015 (Nexreg) 2023