



Propylene

Safety Data Sheet E-4648

according to the Hazardous Products Regulation (February 11, 2015)

Date of issue: 10-15-1979

Revision date: 04-26-2023

Supersedes: 01-01-2021

Version: 1.0

SECTION 1: Identification

1.1. Product identifier

Product form	: Substance
Trade name	: Propylene
CAS No	: 115-07-1
Formula	: C ₃ H ₆
Other means of identification	: FG2; Liquefied Petroleum Gas, Refrigerant Gas R1270, Propylene Grade; 2.8 Research, 2.5 Polymer, 2.0.
Product group	: Core Products

1.2. Recommended use and restrictions on use

Recommended uses and restrictions	: Industrial use Use as directed.
-----------------------------------	--------------------------------------

1.3. Supplier

Linde Canada inc.
500 — 5015 Spectrum Way
Mississauga - Canada L4W 0E4
T 1-905-803-1600 - F 1-905-803-1682
www.lindecana.ca

1.4. Emergency telephone number

Emergency number	: 1-800-363-0042 Call emergency number 24 hours a day only for spills, leaks, fire, exposure, or accidents involving this product. For routine information, contact your supplier or Linde sales representative.
------------------	--

SECTION 2: Hazard identification

2.1. Classification of the substance or mixture

GHS-CA classification

Flammable gases, Category 1	H220
Gases under pressure : Liquefied gas	H280
Simple Asphyxiant	

2.2. GHS Label elements, including precautionary statements

GHS-CA labelling

Hazard pictograms	:  
	GHS02 GHS04

Signal word	: DANGER
-------------	----------

Hazard statements	: EXTREMELY FLAMMABLE GAS CONTAINS GAS UNDER PRESSURE; MAY EXPLODE IF HEATED MAY DISPLACE OXYGEN AND CAUSE RAPID SUFFOCATION MAY CAUSE FROSTBITE. MAY FORM EXPLOSIVE MIXTURES WITH AIR.
-------------------	--

Precautionary statements	: Do not handle until all safety precautions have been read and understood 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. In case of leakage, eliminate all ignition sources
--------------------------	---

This document is only controlled at the time received electronically directly from Linde or while on the Linde Canada Inc. website where a copy of this controlled version is available for download.
Linde cannot assure the integrity or accuracy of any version of this document after it has been electronically downloaded or removed from our website.



Propylene

Safety Data Sheet E-4648

according to the Hazardous Products Regulation (February 11, 2015)

Date of issue: 10-15-1979

Revision date: 04-26-2023

Supersedes: 01-01-2021

Version: 1.0

Use and store only outdoors or in a well-ventilated place.
Use a back flow preventive device in the piping.
Use only with equipment rated for cylinder pressure.
Close valve after each use and when empty.
Protect from sunlight when ambient temperature exceeds 52°C (125°F).

2.3. Other hazards

Other hazards which do not result in classification : Contact with liquid may cause cold burns/frostbite.

2.4. Unknown acute toxicity (GHS CA)

Not applicable

SECTION 3: Composition/information on ingredients

3.1. Substances

Name	CAS No.	% (Vol.)	Common Name (synonyms)
Propylene (Main constituent)	(CAS No) 115-07-1	100	Propylene / 1-Propene / n-Propene / 1-Propylene / Prop-1-ene

3.2. Mixtures

Not applicable

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures after inhalation : Remove victim to uncontaminated area wearing self contained breathing apparatus. Keep victim warm and rested. Call a doctor. Apply artificial respiration if breathing stopped. Remove to fresh air and keep at rest in a position comfortable for breathing. If not breathing, give artificial respiration. If breathing is difficult, trained personnel should give oxygen. Call a physician.

First-aid measures after skin contact : The liquid may cause frostbite. For exposure to liquid, immediately warm frostbite area with warm water not to exceed 105°F (41°C). Water temperature should be tolerable to normal skin. Maintain skin warming for at least 15 minutes or until normal coloring and sensation have returned to the affected area. In case of massive exposure, remove clothing while showering with warm water. Seek medical evaluation and treatment as soon as possible, Adverse effects not expected from this product.

First-aid measures after eye contact : Immediately flush eyes thoroughly with water for at least 15 minutes. Hold the eyelids open and away from the eyeballs to ensure that all surfaces are flushed thoroughly. Contact an ophthalmologist immediately. Get immediate medical attention. Immediately flush eyes thoroughly with water for at least 15 minutes.

First-aid measures after ingestion : Ingestion is not considered a potential route of exposure.

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

Symptoms/injuries : No additional information available

4.3. Immediate medical attention and special treatment, if necessary

Other medical advice or treatment : None.

SECTION 5: Fire-fighting measures

5.1. Suitable extinguishing media

Suitable extinguishing media : Carbon dioxide, Dry chemical, Water spray or fog. Use extinguishing media appropriate for surrounding fire.

5.2. Unsuitable extinguishing media

No additional information available

5.3. Specific hazards arising from the hazardous product

Fire hazard : **EXTREMELY FLAMMABLE GAS.** If venting or leaking gas catches fire, do not extinguish flames. Flammable vapors may spread from leak, creating an explosive reignition hazard. Vapors can be ignited by pilot lights, other flames, smoking, sparks, heaters, electrical equipment, static discharge, or other ignition sources at locations distant from product handling point. Explosive atmospheres may linger. Before entering an area, especially a confined area, check the atmosphere with an appropriate device.

This document is only controlled at the time received electronically directly from Linde or while on the Linde Canada Inc. website where a copy of this controlled version is available for download. Linde cannot assure the integrity or accuracy of any version of this document after it has been electronically downloaded or removed from our website.



Propylene

Safety Data Sheet E-4648

according to the Hazardous Products Regulation (February 11, 2015)

Date of issue: 10-15-1979

Revision date: 04-26-2023

Supersedes: 01-01-2021

Version: 1.0

Explosion hazard	: EXTREMELY FLAMMABLE GAS. Forms explosive mixtures with air and oxidizing agents.
Reactivity	: No reactivity hazard other than the effects described in sub-sections below.
Reactivity in case of fire	: No reactivity hazard other than the effects described in sub-sections below.

5.4. Special protective equipment and precautions for fire-fighters

Firefighting instructions	: Evacuate all personnel from the danger area. Use self-contained breathing apparatus (SCBA) and protective clothing. Immediately cool containers with water from maximum distance. Stop flow of gas if safe to do so, while continuing cooling water spray. Remove ignition sources if safe to do so. Remove containers from area of fire if safe to do so. On-site fire brigades must comply with their provincial and local fire code regulations.
Protection during firefighting	: Compressed gas: asphyxiant. Suffocation hazard by lack of oxygen. DANGER! FLAMMABLE, HIGH PRESSURE GAS..
Special protective equipment for fire fighters	: Standard protective clothing and equipment (Self Contained Breathing Apparatus) for fire fighters.
Specific methods	: Use fire control measures appropriate for the surrounding fire. Exposure to fire and heat radiation may cause gas containers to rupture. Cool endangered containers with water spray jet from a protected position. Prevent water used in emergency cases from entering sewers and drainage systems. Stop flow of product if safe to do so. Use water spray or fog to knock down fire fumes if possible. Do not extinguish a leaking gas flame unless absolutely necessary. Spontaneous/explosive re-ignition may occur. Extinguish any other fire.
Other information	: Containers are equipped with a pressure relief device. (Exceptions may exist where authorized.).

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures	: Eliminate ignition sources. Evacuate area. Prevent from entering sewers, basements and workpits, or any place where its accumulation can be dangerous. Wear self-contained breathing apparatus when entering area unless atmosphere is proven to be safe. Ensure adequate ventilation. Stop leak if safe to do so. If venting or leaking gas catches fire, do not extinguish flames. Flammable vapors may spread from leak, creating an explosive reignition hazard. Vapors can be ignited by pilot lights, other flames, smoking, sparks, heaters, electrical equipment, static discharge, or other ignition sources at locations distant from product handling point. Explosive atmospheres may linger. Before entering an area, especially a confined area, check the atmosphere with an appropriate device.
Personal Precautions, Protective Equipment and Emergency Procedures	: General measures : Ensure adequate ventilation. Personal Precautions, Protective Equipment and Emergency Procedures : EVACUATE ALL PERSONNEL FROM AFFECTED AREA. Use appropriate protective equipment. If leak is on user's equipment, be certain to purge piping before attempting repairs. If leak is on a container or container valve contact the closest Linde Canada location.

6.2. Methods and materials for containment and cleaning up

For containment	: Prevent runoff from contaminating the surrounding environment. Try to stop release if safe to do so.
Methods for cleaning up	: Dispose of contents/container in accordance with local/regional/national/international regulations. Contact supplier for any special requirements.



Propylene

Safety Data Sheet E-4648

according to the Hazardous Products Regulation (February 11, 2015)

Date of issue: 10-15-1979

Revision date: 04-26-2023

Supersedes: 01-01-2021

Version: 1.0

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use only non-sparking tools. Use only explosion-proof equipment.

Wear leather safety gloves and safety shoes when handling cylinders. Protect cylinders from physical damage; do not drag, roll, slide or drop. While moving cylinder, always keep in place removable valve cover. Never attempt to lift a cylinder by its cap; the cap is intended solely to protect the valve. When moving cylinders, even for short distances, use a cart (trolley, hand truck, etc.) designed to transport cylinders. Never insert an object (e.g. wrench, screwdriver, pry bar) into cap openings; doing so may damage the valve and cause a leak. Use an adjustable strap wrench to remove over-tight or rusted caps. Slowly open the valve. If the valve is hard to open, discontinue use and contact your supplier. Close the container valve after each use; keep closed even when empty. Never apply flame or localized heat directly to any part of the container. High temperatures may damage the container and could cause the pressure relief device to fail prematurely, venting the container contents. For other precautions in using this product, see section 16.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store only where temperature will not exceed 52 °C (125 °F). Post "No Smoking/No Open Flames" signs in storage and use areas. There must be no sources of ignition. Separate packages and protect against potential fire and/or explosion damage following appropriate codes and requirements (e.g.: CSA, TSSA, or NFPA Codes), or according to the provincial requirements determined by the Authority Having Jurisdiction (AHJ). Always secure containers upright to keep them from falling or being knocked over. Install valve protection cap, if provided, firmly in place by hand when the container is not in use. Store full and empty containers separately. Use a first-in, first-out inventory system to prevent storing full containers for long periods. For other precautions in using this product, see section 16.

OTHER PRECAUTIONS FOR HANDLING, STORAGE, AND USE: When handling product under pressure, use piping and equipment adequately designed to withstand the pressures to be encountered. Never work on a pressurized system. Use a back flow preventive device in the piping. Gases can cause rapid suffocation because of oxygen deficiency; store and use with adequate ventilation. If a leak occurs, close the container valve and blow down the system in a safe and environmentally correct manner in compliance with all international, federal/national, state/provincial, and local laws; then repair the leak. Never place a container where it may become part of an electrical circuit.

Store in a cool, well-ventilated place. Store and use with adequate ventilation. Store only where temperature will not exceed 52 °C (125 °F). Firmly secure containers upright to keep them from falling or being knocked over. Install valve protection cap firmly in place by hand. Store full and empty containers separately. Use a first-in, first-out inventory system to prevent storing full containers for long periods.

Store only where temperature will not exceed 52 °C (125 °F). Post "No Smoking/No Open Flames" signs in storage and use areas. There must be no sources of ignition. Separate packages and protect against potential fire and/or explosion damage following appropriate codes and requirements (e.g.: CSA, TSSA, or NFPA Codes), or according to the provincial requirements determined by the Authority Having Jurisdiction (AHJ). Always secure containers upright to keep them from falling or being knocked over. Install valve protection cap, if provided, firmly in place by hand when the container is not in use. Store full and empty containers separately. Use a first-in, first-out inventory system to prevent storing full containers for long periods. For other precautions in using this product, see section 16.

Incompatible products : Oxidizer.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Propylene (115-07-1)		
USA - ACGIH	ACGIH OEL TWA [ppm]	500 ppm
Alberta	OEL TWA	860 mg/m ³
Alberta	OEL TWA [ppm]	500 ppm
British Columbia	OEL TWA [ppm]	500 ppm
Manitoba	OEL TWA [ppm]	500 ppm

This document is only controlled at the time received electronically directly from Linde or while on the Linde Canada Inc. website where a copy of this controlled version is available for download. Linde cannot assure the integrity or accuracy of any version of this document after it has been electronically downloaded or removed from our website.



Propylene

Safety Data Sheet E-4648

according to the Hazardous Products Regulation (February 11, 2015)

Date of issue: 10-15-1979

Revision date: 04-26-2023

Supersedes: 01-01-2021

Version: 1.0

Propylene (115-07-1)

New Foundland & Labrador	OEL TWA [ppm]	500 ppm
Nova Scotia	OEL TWA [ppm]	500 ppm
Ontario	OEL TWA [ppm]	500 ppm
Prince Edward Island	OEL TWA [ppm]	500 ppm

8.2. Appropriate engineering controls

Appropriate engineering controls

: During welding, ensure that there is adequate ventilation to keep worker exposure below applicable limits for fumes, gases, and other by-products of welding. Do not breathe fumes or gases. Short-term overexposure to fumes may cause dizziness, nausea, and dryness or irritation of the nose, throat, and eyes, or may cause other similar discomfort. Use an explosion-proof local exhaust system. Local exhaust and general ventilation must be adequate to meet exposure standards. **MECHANICAL (GENERAL): Inadequate - Use only in a closed system.** Use explosion proof equipment and lighting. Provide adequate general and local exhaust ventilation. Ensure exposure is below occupational exposure limits (where available).

8.3. Individual protection measures/Personal protective equipment

Personal protective equipment

: Safety glasses. Face shield. Gloves.



Hand protection

: Wear work gloves when handling containers. Wear heavy rubber gloves where contact with product may occur.

Eye protection

: Wear goggles when transfilling or breaking transfer connections. Wear safety glasses with side shields. Select in accordance with the current CSA standard Z94.3, "Industrial Eye and Face Protection", and any provincial regulations, local bylaws or guidelines. Safety eye wear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists or dusts. Select in accordance with the current CSA standard Z94.3, "Industrial Eye and Face Protection", and any provincial regulations, local bylaws or guidelines.

Respiratory protection

: **Respiratory protection:** Use air supplied respirator when working in confined space or where local exhaust or ventilation does not keep exposure below OEL (if applicable). Select in accordance with provincial regulations, local bylaws or guidelines. Respirators should also be approved by NIOSH and MSHA. For emergencies or instances with unknown exposure levels, use a self-contained breathing apparatus (SCBA).

Thermal hazard protection

: Wear cold insulating gloves when transfilling or breaking transfer connections.

Environmental exposure controls

: Refer to local regulations for restriction of emissions to the atmosphere. See section 13 for specific methods for waste gas treatment.

Other information

: **Other protection :** Safety shoes for general handling at customer sites. Metatarsal shoes and cuffless trousers for cylinder handling at packaging and filling plants. Select in accordance with the current CSA standard Z195, "Protective Foot Wear", and any provincial regulations, local bylaws or guidelines. For working with flammable and oxidizing materials, consider the use of flame resistant anti-static safety clothing.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

- | | |
|-------------------------------|---|
| (a) Physical state | : Gas |
| (b) Colour | : Colourless. |
| (c) Odour | : Stenchant often added. Sweetish. |
| Odour threshold | : Odour threshold is subjective and inadequate to warn of overexposure. |
| (d) Melting point | : No data available |
| Freezing point | : -185.25 °C (-301.45°F) |
| (e) Boiling point | : -47.7 °C (-53.9°F) |
| (f) Flammability | : Flammable |
| (g) Flammability (solid, gas) | : 2 – 11.1 |
| (h) Flash point | : -107.8 °C (-162°F) |
| (i) Auto-ignition temperature | : 455 °C (851°F) |

This document is only controlled at the time received electronically directly from Linde or while on the Linde Canada Inc. website where a copy of this controlled version is available for download. Linde cannot assure the integrity or accuracy of any version of this document after it has been electronically downloaded or removed from our website.



Propylene

Safety Data Sheet E-4648

according to the Hazardous Products Regulation (February 11, 2015)

Date of issue: 10-15-1979

Revision date: 04-26-2023

Supersedes: 01-01-2021

Version: 1.0

(j) Decomposition temperature	: No data available
(k) pH	: Not applicable.
(l) Viscosity, kinematic	: Not applicable.
(m) Solubility	: Water: 384 mg/l
(n) Partition coefficient – n-octanol/water [log Pow/log Kow]	: 1.77
(o) Vapour pressure	: 10.2 bar (132.81 psig) @70°F (21.1 °C), 1 ATM
(p) Density	: 0.5139 g/cm ³ (at 20 °C)
Relative gas density	: 1.5
(r) Particle characteristics	: No data available
(s) Molecular mass	: 42 g/mol
(t) Critical temperature	: 91.8 °C (197.24°F)
(v) Oxidizing properties	: None.
(w) Relative evaporation rate (butylacetate=1)	: No data available
Relative evaporation rate (ether=1)	: Not applicable.

9.2. Other information

Gas group	: Liquefied gas
Additional information	: Gas/vapour heavier than air. May accumulate in confined spaces, particularly at or below ground level.

SECTION 10: Stability and reactivity

Reactivity	: No reactivity hazard other than the effects described in sub-sections below.
Chemical stability	: Stable under normal conditions.
Possibility of hazardous reactions	: Can form explosive mixture with air. May react violently with oxidants.
Conditions to avoid	: Keep away from heat/sparks/open flames/hot surfaces. – No smoking.
Incompatible materials	: Oxidizer. Acids. Halogens.
Hazardous decomposition products	: Thermal decomposition or burning may produce carbon monoxide, carbon dioxide, and hydrogen. The welding and cutting process may form reaction products such as carbon monoxide and carbon dioxide. Other decomposition products of normal operation originate from the volatilization, reaction, or oxidation of the material being worked.

SECTION 11: Toxicological information

11.1 Likely routes of exposure	: Inhalation
---------------------------------------	--------------

11.2 Symptoms related to the physical, chemical, and toxicological characteristics	: No additional information available
---	---------------------------------------

11.3 Delayed and immediate effects and chronic effects

Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified.
Skin corrosion/irritation	: Not classified
	pH: Not applicable.
Serious eye damage/irritation	: Not classified
	pH: Not applicable.

This document is only controlled at the time received electronically directly from Linde or while on the Linde Canada Inc. website where a copy of this controlled version is available for download. Linde cannot assure the integrity or accuracy of any version of this document after it has been electronically downloaded or removed from our website.



Propylene

Safety Data Sheet E-4648

according to the Hazardous Products Regulation (February 11, 2015)

Date of issue: 10-15-1979

Revision date: 04-26-2023

Supersedes: 01-01-2021

Version: 1.0

Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
IARC group	: 3 - Not classifiable
Reproductive toxicity	: Not classified
Specific target organ toxicity (single exposure)	: Not classified
Specific target organ toxicity (repeated exposure)	: Not classified
Aspiration hazard	: Not classified

11.4 Toxicity

Propylene (1f)115-07-1	
LC50 inhalation rat (ppm)	> 65000 ppm/4h

Propylene (115-07-1)	
Hydrocarbon	Yes

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : No ecological damage caused by this product.

12.2. Persistence and degradability

Propylene (115-07-1)	
Persistence and degradability	The substance is biodegradable. Unlikely to persist.

12.3. Bioaccumulative potential

Propylene (115-07-1)	
Log Pow	1.77
Log Kow	Not applicable.
Bioaccumulative potential	Not expected to bioaccumulate due to the low log Kow (log Kow < 4). Refer to section 9.

12.4. Mobility in soil

Propylene (115-07-1)	
Mobility in soil	No data available.
Log Pow	1.77
Log Kow	Not applicable.
Ecology - soil	Because of its high volatility, the product is unlikely to cause ground or water pollution.

12.5. Other adverse effects

Effect on the ozone layer : None.
Effect on global warming : No known effects from this product.

SECTION 13: Disposal considerations

Product/Packaging disposal recommendations : Dispose of contents/container in accordance with local/regional/national/international regulations. Contact supplier for any special requirements. Dispose of contents/container in accordance with local/regional/national/international regulations. Contact supplier for any special requirements.

SECTION 14: Transport information

This document is only controlled at the time received electronically directly from Linde or while on the Linde Canada Inc. website where a copy of this controlled version is available for download. Linde cannot assure the integrity or accuracy of any version of this document after it has been electronically downloaded or removed from our website.



Propylene

Safety Data Sheet E-4648

according to the Hazardous Products Regulation (February 11, 2015)

Date of issue: 10-15-1979

Revision date: 04-26-2023

Supersedes: 01-01-2021

Version: 1.0

14.1. Basic shipping description

In accordance with TDG

TDG

UN-No. (TDG) : UN1075
TDG Primary Hazard Classes : 2.1 - Class 2.1 - Flammable Gases
Proper shipping name : LIQUEFIED PETROLEUM GASES

ERAP Index : 3 000
Explosive Limit and Limited Quantity Index : 0.125 L
Passenger Carrying Ship Index : 110 kg
Passenger Carrying Road Vehicle or Passenger : Forbidden
Carrying Railway Vehicle Index

14.2. Air and sea transport

IMDG

UN-No. (IMDG) : 1075
Proper Shipping Name (IMDG) : PETROLEUM GASES, LIQUEFIED
Class (IMDG) : 2 - Gases
MFAG-No : 115

IATA

UN-No. (IATA) : 1075
Proper Shipping Name (IATA) : Petroleum gases, liquefied
Class (IATA) : 2 - Gases

SECTION 15: Regulatory information

15.1. National regulations

Propylene (115-07-1)

Listed on the Canadian DSL (Domestic Substances List)

15.2. International regulations

Propylene (115-07-1)

Listed on the AICS (Australian Inventory of Chemical Substances)
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)
Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory
Listed on the Japanese ISHL (Industrial Safety and Health Law)
Listed on the Korean ECL (Existing Chemicals List)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Listed on the United States TSCA (Toxic Substances Control Act) inventory
Listed on INSQ (Mexican National Inventory of Chemical Substances)

SECTION 16: Other information

Date of issue : 15/10/1979
Revision date : 26/04/2023
Supersedes : 01/01/2021

Indication of changes:

Training advice : The hazard of asphyxiation is often overlooked and must be stressed during operator training.
Ensure operators understand the flammability hazard.

This document is only controlled at the time received electronically directly from Linde or while on the Linde Canada Inc. website where a copy of this controlled version is available for download.
Linde cannot assure the integrity or accuracy of any version of this document after it has been electronically downloaded or removed from our website.



Propylene

Safety Data Sheet E-4648

according to the Hazardous Products Regulation (February 11, 2015)

Date of issue: 10-15-1979

Revision date: 04-26-2023

Supersedes: 01-01-2021

Version: 1.0

Other information

: When you mix two or more chemicals, you can create additional, unexpected hazards. Obtain and evaluate the safety information for each component before you produce the mixture. Consult an industrial hygienist or other trained person when you evaluate the end product. Before using any plastics, confirm their compatibility with this product.

Linde Canada asks users of this product to study this SDS and become aware of the product hazards and safety information. To promote safe use of this product, a user should (1) notify employees, agents, and contractors of the information in this SDS and of any other known product hazards and safety information, (2) furnish this information to each purchaser of the product, and (3) ask each purchaser to notify its employees and customers of the product hazards and safety information.

The opinions expressed herein are those of qualified experts within Linde Canada Inc. We believe that the information contained herein is current as of the date of this Safety Data Sheet. Since the use of this information and the conditions of use are not within the control of Linde Canada Inc, it is the user's obligation to determine the conditions of safe use of the product. Linde Canada Inc, SDSs are furnished on sale or delivery by Linde Canada Inc, or the independent distributors and suppliers who package and sell our products. To obtain current SDSs for these products, contact your Linde sales representative, local distributor, or supplier, or download from www.lindecana.ca.

NFPA health hazard

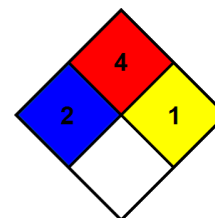
: 2 - Intense or continued exposure could cause temporary incapacitation or possible residual injury unless prompt medical attention is given.

NFPA fire hazard

: 4 - Will rapidly or completely vaporize at normal pressure and temperature, or is readily dispersed in air and will burn readily.

NFPA instability

: 1 - Normally stable, but can become unstable at elevated temperatures and pressures or may react with water with some release of energy, but not violently.



HMIS III Rating

Health

: 1 Slight Hazard - Irritation or minor reversible injury possible

Flammability

: 4 Severe Hazard - Flammable gases, or very volatile flammable liquids with flash points below 73 F, and boiling points below 100 F. Materials may ignite spontaneously with air. (Class IA)

Physical

: 2 Moderate Hazard - Materials that are unstable and may undergo violent chemical changes at normal temperature and pressure with low risk for explosion. Materials may react violently with water or form peroxides upon exposure to air.

SDS Canada (GHS) - Linde NEW

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.