

SECTION 1: Identification

1.1. Product identifier

Product form : Mixture
Name : BAR Mixtures with NO
Other means of identification : BAR Mixtures with NO
Product group : Core Products

1.2. Recommended use and restrictions on use

Recommended uses and restrictions : Industrial use

1.3. Supplier

Praxair Canada inc.
1200 – 1 City Centre Drive
Mississauga - Canada L5B 1M2
T 1-905-803-1600 - F 1-905-803-1682
www.praxair.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 Praxair sales representative.

SECTION 2: Hazard identification

2.1. Classification of the substance or mixture

GHS-CA classification

Compressed gas H280

2.2. GHS Label elements, including precautionary statements

GHS-CA labelling

Hazard pictograms :



GHS04

Signal word : WARNING

Hazard statements : CONTAINS GAS UNDER PRESSURE; MAY EXPLODE IF HEATED
MAY CAUSE DROWSINESS OR DIZZINESS
MAY DISPLACE OXYGEN AND CAUSE RAPID SUFFOCATION
MAY INCREASE RESPIRATION AND HEART RATE

Precautionary statements : Do not handle until all safety precautions have been read and understood
Use and store only outdoors or in a well-ventilated area
Protect from sunlight when ambient temperature exceeds 52°C (125°F)
Close valve after each use and when empty
Do not open valve until connected to equipment prepared for use

2.3. Other hazards

Other hazards not contributing to the classification : Most of these mixtures are asphyxiants. Effects are due to lack of oxygen. Mixtures containing carbon dioxide are also physiologically active, affecting circulation and breathing. Moderate concentrations may cause headache, drowsiness, dizziness, stinging of the nose and throat, excitation, rapid breathing, excess salivation, vomiting, and unconsciousness. Lack of oxygen can kill.



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2.4. Unknown acute toxicity (GHS-CA)

No data available

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	CAS No.	% (Vol)	Common Name (synonyms)
Nitrogen	(CAS No) 7727-37-9	77.4 - 99.999	Nitrogen (liquified) / Nitrogen gas / Nitrogen, liquefied / Nitrogen, compressed / NITROGEN
Carbon dioxide	(CAS No) 124-38-9	0.001 - 14	CARBON DIOXIDE
Carbon monoxide	(CAS No) 630-08-0	0.001 - 8	Carbon monoxide, compressed / Compressed carbon monoxide / Carbon oxide (CO) / Carbonmonoxide / Carbon(II) oxide
Nitric oxide	(CAS No) 10102-43-9	0.03 - 0.32	Nitric oxide / Nitrogen oxide (NO) / Nitric monoxide / Nitric oxide (NO) / Nitric oxide, compressed / Nitrogen(II) oxide / Nitricoxide
Propane	(CAS No) 74-98-6	0.001 - 0.32	Propane liquefied / Normal propane / n-Propane / PROPANE
Nitrogen dioxide	(CAS No) 10102-44-0	0.001 - 0.003	Nitrogen oxide (NO2) / Nitrogen oxide / Nitrogen(IV) oxide

SECTION 4: First-aid measures

4.1. Description of first aid measures

- First-aid measures after inhalation : Immediately remove to fresh air. If not breathing, clear airways of any slurry or caked material and give artificial respiration. If breathing is difficult, qualified personnel may give oxygen. Call a physician.
- First-aid measures after skin contact : Immediately flush the contact area with plenty of water.
- First-aid measures after eye contact : Direct contact with the eyes is likely to be irritating. Obtain medical attention if pain, blinking or redness persist.
- First-aid measures after ingestion : Not expected to be a primary route of exposure.

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

- Symptoms/injuries after skin contact : Burns.

4.3. Immediate medical attention and special treatment, if necessary

No additional information available

SECTION 5: Fire-fighting measures

5.1. Suitable extinguishing media

- Suitable extinguishing media : 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 : Under certain conditions, nitrogen can react violently with lithium, neodymium, titanium (above 1472°F/800°C), or magnesium to form nitrides. At high temperature, it can also combine with oxygen and hydrogen.
- Reactivity in case of fire : Under certain conditions, nitrogen can react violently with lithium, neodymium, titanium (above 1472°F/800°C), or magnesium to form nitrides. At high temperature, it can also combine with oxygen and hydrogen.

5.4. Special protective equipment and precautions for fire-fighters

- Firefighting instructions : **WARNING: High pressure gas**

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.

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Other information : Heat of fire can build pressure in container and cause it to rupture. Cylinders are equipped with a pressure relief device. (Exceptions may exist where authorized by TC.) No part of the container should be subjected to a temperature higher than 125°F (52°C). Smoking, flames, and electric sparks in the presence of enriched oxygen atmospheres are potential explosion hazards.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : **WARNING: High-pressure gas.** Evacuate personnel to a safe area. Appropriate self-contained breathing apparatus may be required. Approach suspected leak area with caution. Remove all sources of ignition, if safe to do so. Reduce gas with fog or fine water spray. Stop flow of product if safe to do so. Ventilate area or move container to a well-ventilated area. Before entering the area, especially a confined area, test for sufficient oxygen.

6.2. Methods and materials for containment and cleaning up

For containment : Prevent runoff from contaminating the surrounding environment.

6.3. 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

Precautions for safe handling : When moving cylinders, even for short distances, use a cart (trolley, hand truck, etc.) designed to transport cylinders.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in a cool, well-ventilated place. Store and use with adequate ventilation. Store only where temperature will not exceed 125°F (52°C). Firmly secure containers upright to keep them from falling or being knocked over. Install valve protection cap, if provided, 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.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Nitric oxide (10102-43-9)		
USA - ACGIH	ACGIH TLV-TWA (ppm)	25 ppm
USA - OSHA	OSHA PEL (TWA) (mg/m ³)	30 mg/m ³
USA - OSHA	OSHA PEL (TWA) (ppm)	25 ppm
Canada (Quebec)	VEMP (mg/m ³)	31 mg/m ³
Canada (Quebec)	VEMP (ppm)	25 ppm
Alberta	OEL TWA (mg/m ³)	31 mg/m ³
Alberta	OEL TWA (ppm)	25 ppm
British Columbia	OEL TWA (ppm)	25 ppm
Manitoba	OEL TWA (ppm)	25 ppm
New Brunswick	OEL TWA (mg/m ³)	31 mg/m ³
New Brunswick	OEL TWA (ppm)	25 ppm
New Foundland & Labrador	OEL TWA (ppm)	25 ppm
Nova Scotia	OEL TWA (ppm)	25 ppm
Nunavut	OEL STEL (mg/m ³)	43 mg/m ³
Nunavut	OEL STEL (ppm)	35 ppm
Nunavut	OEL TWA (mg/m ³)	31 mg/m ³
Nunavut	OEL TWA (ppm)	25 ppm
Northwest Territories	OEL STEL (ppm)	38 ppm

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Nitric oxide (10102-43-9)		
Northwest Territories	OEL TWA (ppm)	25 ppm
Ontario	OEL TWA (ppm)	25 ppm
Prince Edward Island	OEL TWA (ppm)	25 ppm
Québec	VEMP (mg/m ³)	31 mg/m ³
Québec	VEMP (ppm)	25 ppm
Saskatchewan	OEL STEL (ppm)	38 ppm
Saskatchewan	OEL TWA (ppm)	25 ppm
Yukon	OEL STEL (mg/m ³)	45 mg/m ³
Yukon	OEL STEL (ppm)	35 ppm
Yukon	OEL TWA (mg/m ³)	30 mg/m ³
Yukon	OEL TWA (ppm)	25 ppm
Carbon monoxide (630-08-0)		
USA - ACGIH	ACGIH TLV-TWA (ppm)	25 ppm
USA - OSHA	OSHA PEL (TWA) (mg/m ³)	55 mg/m ³
USA - OSHA	OSHA PEL (TWA) (ppm)	50 ppm
Canada (Quebec)	VECD (mg/m ³)	230 mg/m ³
Canada (Quebec)	VECD (ppm)	200 ppm
Canada (Quebec)	VEMP (mg/m ³)	40 mg/m ³
Canada (Quebec)	VEMP (ppm)	35 ppm
Alberta	OEL TWA (mg/m ³)	29 mg/m ³
Alberta	OEL TWA (ppm)	25 ppm
British Columbia	OEL STEL (ppm)	100 ppm
British Columbia	OEL TWA (ppm)	25 ppm
Manitoba	OEL TWA (ppm)	25 ppm
New Brunswick	OEL TWA (mg/m ³)	29 mg/m ³
New Brunswick	OEL TWA (ppm)	25 ppm
New Foundland & Labrador	OEL TWA (ppm)	25 ppm
Nova Scotia	OEL TWA (ppm)	25 ppm
Nunavut	OEL STEL (mg/m ³)	460 mg/m ³
Nunavut	OEL STEL (ppm)	400 ppm
Nunavut	OEL TWA (mg/m ³)	57 mg/m ³
Nunavut	OEL TWA (ppm)	50 ppm
Northwest Territories	OEL STEL (ppm)	190 ppm
Northwest Territories	OEL TWA (ppm)	25 ppm
Ontario	OEL TWA (ppm)	25 ppm
Prince Edward Island	OEL TWA (ppm)	25 ppm
Québec	VECD (mg/m ³)	230 mg/m ³
Québec	VECD (ppm)	200 ppm
Québec	VEMP (mg/m ³)	40 mg/m ³
Québec	VEMP (ppm)	35 ppm
Saskatchewan	OEL STEL (ppm)	190 ppm
Saskatchewan	OEL TWA (ppm)	25 ppm
Yukon	OEL STEL (mg/m ³)	440 mg/m ³
Yukon	OEL STEL (ppm)	400 ppm
Yukon	OEL TWA (mg/m ³)	55 mg/m ³
Yukon	OEL TWA (ppm)	50 ppm

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Carbon dioxide (124-38-9)		
USA - ACGIH	ACGIH TLV-TWA (ppm)	5000 ppm
USA - ACGIH	ACGIH TLV-STEL (ppm)	30000 ppm
USA - OSHA	OSHA PEL (TWA) (mg/m ³)	9000 mg/m ³
USA - OSHA	OSHA PEL (TWA) (ppm)	5000 ppm
Canada (Quebec)	VECD (mg/m ³)	54000 mg/m ³
Canada (Quebec)	VECD (ppm)	30000 ppm
Canada (Quebec)	VEMP (mg/m ³)	9000 mg/m ³
Canada (Quebec)	VEMP (ppm)	5000 ppm
Alberta	OEL STEL (mg/m ³)	54000 mg/m ³
Alberta	OEL STEL (ppm)	30000 ppm
Alberta	OEL TWA (mg/m ³)	9000 mg/m ³
Alberta	OEL TWA (ppm)	5000 ppm
British Columbia	OEL STEL (ppm)	15000 ppm
British Columbia	OEL TWA (ppm)	5000 ppm
Manitoba	OEL STEL (ppm)	30000 ppm
Manitoba	OEL TWA (ppm)	5000 ppm
New Brunswick	OEL STEL (mg/m ³)	54000 mg/m ³
New Brunswick	OEL STEL (ppm)	30000 ppm
New Brunswick	OEL TWA (mg/m ³)	9000 mg/m ³
New Brunswick	OEL TWA (ppm)	5000 ppm
New Foundland & Labrador	OEL STEL (ppm)	30000 ppm
New Foundland & Labrador	OEL TWA (ppm)	5000 ppm
Nova Scotia	OEL STEL (ppm)	30000 ppm
Nova Scotia	OEL TWA (ppm)	5000 ppm
Nunavut	OEL STEL (mg/m ³)	27000 mg/m ³
Nunavut	OEL STEL (ppm)	15000 ppm
Nunavut	OEL TWA (mg/m ³)	9000 mg/m ³
Nunavut	OEL TWA (ppm)	5000 ppm
Northwest Territories	OEL STEL (ppm)	30000 ppm
Northwest Territories	OEL TWA (ppm)	5000 ppm
Ontario	OEL STEL (ppm)	30000 ppm
Ontario	OEL TWA (ppm)	5000 ppm
Prince Edward Island	OEL STEL (ppm)	30000 ppm
Prince Edward Island	OEL TWA (ppm)	5000 ppm
Québec	VECD (mg/m ³)	54000 mg/m ³
Québec	VECD (ppm)	30000 ppm
Québec	VEMP (mg/m ³)	9000 mg/m ³
Québec	VEMP (ppm)	5000 ppm
Saskatchewan	OEL STEL (ppm)	30000 ppm
Saskatchewan	OEL TWA (ppm)	5000 ppm
Yukon	OEL STEL (mg/m ³)	27000 mg/m ³
Yukon	OEL STEL (ppm)	15000 ppm
Yukon	OEL TWA (mg/m ³)	9000 mg/m ³
Yukon	OEL TWA (ppm)	5000 ppm

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Propane (74-98-6)		
USA - OSHA	OSHA PEL (TWA) (mg/m ³)	1800 mg/m ³
USA - OSHA	OSHA PEL (TWA) (ppm)	1000 ppm
Canada (Quebec)	VEMP (mg/m ³)	1800 mg/m ³
Canada (Quebec)	VEMP (ppm)	1000 ppm
Alberta	OEL TWA (ppm)	1000 ppm
British Columbia	OEL TWA (ppm)	1000 ppm
Northwest Territories	OEL STEL (ppm)	1250 ppm
Northwest Territories	OEL TWA (ppm)	1000 ppm
Québec	VEMP (mg/m ³)	1800 mg/m ³
Québec	VEMP (ppm)	1000 ppm
Saskatchewan	OEL STEL (ppm)	1250 ppm
Saskatchewan	OEL TWA (ppm)	1000 ppm
Nitrogen dioxide (10102-44-0)		
USA - ACGIH	ACGIH TLV-TWA (ppm)	0.2 ppm
USA - OSHA	OSHA PEL (Ceiling) (mg/m ³)	9 mg/m ³
USA - OSHA	OSHA PEL (Ceiling) (ppm)	5 ppm
Canada (Quebec)	VEMP (mg/m ³)	5.6 mg/m ³
Canada (Quebec)	VEMP (ppm)	3 ppm
Alberta	OEL STEL (mg/m ³)	9.4 mg/m ³
Alberta	OEL STEL (ppm)	5 ppm
Alberta	OEL TWA (mg/m ³)	5.6 mg/m ³
Alberta	OEL TWA (ppm)	3 ppm
British Columbia	OEL Ceiling (ppm)	1 ppm
Manitoba	OEL TWA (ppm)	0.2 ppm
New Brunswick	OEL STEL (mg/m ³)	9.4 mg/m ³
New Brunswick	OEL STEL (ppm)	5 ppm
New Brunswick	OEL TWA (mg/m ³)	5.6 mg/m ³
New Brunswick	OEL TWA (ppm)	3 ppm
New Foundland & Labrador	OEL TWA (ppm)	0.2 ppm
Nova Scotia	OEL TWA (ppm)	0.2 ppm
Nunavut	OEL STEL (mg/m ³)	9.4 mg/m ³
Nunavut	OEL STEL (ppm)	5 ppm
Nunavut	OEL TWA (mg/m ³)	6 mg/m ³
Nunavut	OEL TWA (ppm)	3 ppm
Northwest Territories	OEL STEL (ppm)	5 ppm
Northwest Territories	OEL TWA (ppm)	3 ppm
Ontario	OEL TWA (ppm)	3 ppm
Prince Edward Island	OEL TWA (ppm)	0.2 ppm
Québec	VEMP (mg/m ³)	5.6 mg/m ³
Québec	VEMP (ppm)	3 ppm
Saskatchewan	OEL STEL (ppm)	5 ppm
Saskatchewan	OEL TWA (ppm)	3 ppm
Yukon	OEL Ceiling (mg/m ³)	9 mg/m ³
Yukon	OEL Ceiling (ppm)	5 ppm

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8.2. Appropriate engineering controls

Appropriate engineering controls : Mechanical/General measures: Use in a closed system.

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 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.

Respiratory protection : **Respiratory protection:** Use respirable fume respirator or air supplied respirator when working in confined space or where local exhaust or ventilation does not keep exposure below TLV. Select in accordance with provincial regulations, local bylaws or guidelines. Selection should be based on the current CSA standard Z94.4, "Selection, Care, and Use of Respirators." Respirators should also be approved by NIOSH and MSHA. For emergencies or instances with unknown exposure levels, use a self-contained breathing apparatus (SCBA).

Environmental exposure controls : Refer to local regulations for restriction of emissions to the atmosphere.

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

Physical state	: Gas
Appearance	: No data available
Colour	: No data available
Odour	: No data available
Odour threshold	: No data available
pH	: No data available
pH solution	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Relative evaporation rate (ether=1)	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Vapour pressure	: No data available
Vapour pressure at 50 °C	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Relative density of saturated gas/air mixture	: No data available
Density	: No data available
Relative gas density	: No data available
Solubility	: No data available
Log Pow	: No data available
Log Kow	: No data available
Viscosity, kinematic	: No data available



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Viscosity, kinematic (calculated value) (40 °C) : No data available
Explosive properties : No data available
Oxidizing properties : No data available
Flammability (solid, gas) :

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

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

Nitric oxide (10102-43-9)	
LC50 inhalation rat (ppm)	57.5 ppm/4h

Carbon monoxide (630-08-0)	
LC50 inhalation rat (ppm)	3760 ppm/1h

Nitrogen dioxide (10102-44-0)	
LC50 inhalation rat (ppm)	57.5 ppm/4h

Skin corrosion/irritation : Not classified
Serious eye damage/irritation : Not classified
Respiratory or skin sensitization : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified

Reproductive toxicity : Not classified
Specific target organ toxicity (single exposure) : Not classified
Specific target organ toxicity (repeated exposure) : Not classified

Aspiration hazard : Not classified

SECTION 12: Ecological information

12.1. Toxicity

No additional information available

12.2. Persistence and degradability

Nitric oxide (10102-43-9)	
Persistence and degradability	Not applicable for inorganic gases.

Carbon dioxide (124-38-9)	
Persistence and degradability	No ecological damage caused by this product.

Propane (74-98-6)	
Persistence and degradability	The substance is biodegradable. Unlikely to persist.

Nitrogen dioxide (10102-44-0)	
Persistence and degradability	Not applicable for inorganic gases.

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Nitrogen (7727-37-9)	
Persistence and degradability	No ecological damage caused by this product.

12.3. Bioaccumulative potential

Nitric oxide (10102-43-9)	
Log Pow	Not applicable for inorganic gases.
Log Kow	Not applicable.
Bioaccumulative potential	No data available.

Carbon monoxide (630-08-0)	
Log Kow	Not applicable.

Carbon dioxide (124-38-9)	
BCF fish 1	(no bioaccumulation)
Log Pow	0.83
Log Kow	Not applicable.
Bioaccumulative potential	No ecological damage caused by this product.

Propane (74-98-6)	
Log Pow	2.36
Log Kow	Not applicable.
Bioaccumulative potential	Not expected to bioaccumulate due to the low log Kow (log Kow < 4). Refer to section 9.

Nitrogen dioxide (10102-44-0)	
Log Pow	Not applicable for inorganic gases.
Bioaccumulative potential	No data available.

Nitrogen (7727-37-9)	
Log Pow	Not applicable for inorganic gases.
Log Kow	Not applicable.
Bioaccumulative potential	No ecological damage caused by this product.

12.4. Mobility in soil

Nitric oxide (10102-43-9)	
Mobility in soil	No data available.
Log Pow	Not applicable for inorganic gases.
Log Kow	Not applicable.
Ecology - soil	Because of its high volatility, the product is unlikely to cause ground or water pollution.

Carbon monoxide (630-08-0)	
Mobility in soil	No data available.
Log Kow	Not applicable.

Carbon dioxide (124-38-9)	
Mobility in soil	No data available.
Log Pow	0.83
Log Kow	Not applicable.
Ecology - soil	No ecological damage caused by this product.

Propane (74-98-6)	
Mobility in soil	No data available.
Log Pow	2.36
Log Kow	Not applicable.
Ecology - soil	Because of its high volatility, the product is unlikely to cause ground or water pollution.

Nitrogen dioxide (10102-44-0)	
Log Pow	Not applicable for inorganic gases.
Ecology - soil	Because of its high volatility, the product is unlikely to cause ground or water pollution.

Nitrogen (7727-37-9)	
Mobility in soil	No data available.
Log Pow	Not applicable for inorganic gases.

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Nitrogen (7727-37-9)

Log Kow

Not applicable.

Ecology - soil

No ecological damage caused by this product.

12.5. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Disposal methods

No additional information available

SECTION 14: Transport information

14.1. Basic shipping description

In accordance with TDG

TDG

UN-No. (TDG)

: UN1956

TDG Primary Hazard Classes

: 2.2 - Class 2.2 - Non-Flammable, Non-Toxic Gas.

Proper shipping name

: COMPRESSED GAS, N.O.S.

(Nitrogen, Carbon dioxide)

Explosive Limit and Limited Quantity Index

: 0.125 L

Passenger Carrying Road Vehicle or Passenger

: 75 L

Carrying Railway Vehicle Index

14.3. Air and sea transport

IMDG

No additional information available

IATA

No additional information available

SECTION 15: Regulatory information

15.1. National regulations

Nitric oxide (10102-43-9)

Listed on the Canadian DSL (Domestic Substances List)

Carbon monoxide (630-08-0)

Listed on the Canadian DSL (Domestic Substances List)

Carbon dioxide (124-38-9)

Listed on the Canadian DSL (Domestic Substances List)

Propane (74-98-6)

Listed on the Canadian DSL (Domestic Substances List)

Nitrogen dioxide (10102-44-0)

Listed on the Canadian DSL (Domestic Substances List)

Nitrogen (7727-37-9)

Listed on the Canadian DSL (Domestic Substances List)

15.2. International regulations

BAR Mixtures with NO

Listed on the AICS (Australian Inventory of Chemical Substances)

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Nitric oxide (10102-43-9)

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 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)

Carbon monoxide (630-08-0)

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 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)

Carbon dioxide (124-38-9)

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 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)
Listed on CICR (Turkish Inventory and Control of Chemicals)

Propane (74-98-6)

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 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)
Listed on CICR (Turkish Inventory and Control of Chemicals)

Nitrogen dioxide (10102-44-0)

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 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)

Nitrogen (7727-37-9)

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 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)

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BAR Mixtures with NO

Safety Data Sheet E-4570

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

Date of issue: 10-15-1979

Revision date: 08-02-2016

Supersedes: 10-15-2013

SECTION 16: Other information

Date of issue : 15/10/1979
Revision date : 02/08/2016
Supersedes : 15/10/2013

Indication of changes:

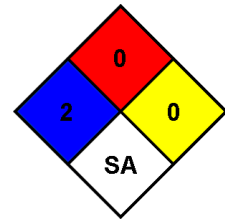
Other information

: Praxair 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

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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 : 0 - Materials that will not burn.
NFPA reactivity : 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.
NFPA specific hazard : SA - This denotes gases which are simple asphyxiants.



HMIS III Rating

Health : 0 Minimal Hazard - No significant risk to health
Flammability : 0 Minimal Hazard - Materials that will not burn
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) - Praxair

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.

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