

Safety Data Sheet P-18-18750

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

Date of issue: 08-11-2016 Revision date: 07-11-2017 Supersedes: 08-11-2016

SECTION 1: Identification

1.1. Product identifier

Product form : Mixture
Product name : P-18-18750

Other means of identification : NI - ME 1ppm - 5%, CD 1ppm - 5%

Product group : Specialty Mixtures

1.2. Recommended use and restrictions on use

No additional information available

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

Simple asphyxiant SIAS 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 DISPLACE OXYGEN AND CAUSE RAPID SUFFOCATION

MAY CAUSE FROSTBITE.

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).

Use a back flow preventive device in the piping. 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

: Asphyxiant in high concentrations.

This document is only controlled while on the Praxair Canada Inc. website and a copy of this controlled version is available for download. Praxair cannot assure the integrity or accuracy of any version of this document after it has been downloaded or removed from our website.

EN (English - CA) SDS ID : P-18-18750 1/9



Safety Data Sheet P-18-18750

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

Revision date: 07-11-2017 Date of issue: 08-11-2016 Supersedes: 08-11-2016

Unknown acute toxicity (GHS-CA)

No data available

SECTION 3: Composition/information on ingredients

Substances

Not applicable

3.2. **Mixtures**

Name	CAS No.	% (Vol)	Common Name (synonyms)
Nitrogen	(CAS No) 7727-37-9	90 - 99.9998	Nitrogen (liquified) / Nitrogen gas / Nitrogen, liquefied / NITROGEN / Nitrogen, compressed
Methane	(CAS No) 74-82-8	0.00001 - 5	Marsh gas / Natural gas, refrigerated liquid / Methane, compressed
Carbon dioxide	(CAS No) 124-38-9	0.00001 - 5	CARBON DIOXIDE

SECTION 4: First-aid measures

Description of first aid measures

First-aid measures after inhalation

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

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..

Most important symptoms and effects (acute and delayed)

No additional information available

Immediate medical attention and special treatment, if necessary 4.3.

Other medical advice or treatment : None.

SECTION 5: Fire-fighting measures

Suitable extinguishing media

: Use extinguishing media appropriate for surrounding fire. Suitable extinguishing media

Unsuitable extinguishing media

No additional information available

Specific hazards arising from the hazardous product 5.3.

Reactivity

: No reactivity hazard other than the effects described in sub-sections below. : No reactivity hazard other than the effects described in sub-sections below.

Reactivity in case of fire

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.

Special protective equipment for fire fighters

Standard protective clothing and equipment (Self Contained Breathing Apparatus) for fire

2/9

fighters.

Other information

EN (English - CA)

: Containers are equipped with a pressure relief device. (Exceptions may exist where authorized.).

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

6.2. Methods and materials for containment and cleaning up

Reference to other sections

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

integrity or accuracy of any version of this document after it has been downloaded or removed from our website. SDS ID: P-18-18750



Safety Data Sheet P-18-18750

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

Date of issue: 08-11-2016 Revision date: 07-11-2017 Supersedes: 08-11-2016

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling

: 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 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.

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.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Methane (74-82-8)		
· , ,	OFI TAVA (correct)	4000
British Columbia	OEL TWA (ppm)	1000 ppm
Nunavut	OEL STEL (ppm)	1250 ppm
Nunavut	OEL TWA (ppm)	1000 ppm
Northwest Territories	OEL STEL (ppm)	1250 ppm
Northwest Territories	OEL TWA (ppm)	1000 ppm
Saskatchewan	OEL STEL (ppm)	1250 ppm
Saskatchewan	OEL TWA (ppm)	1000 ppm
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/m³)	9000 mg/m³
USA - OSHA	OSHA PEL (TWA) (ppm)	5000 ppm
Canada (Quebec)	VECD (mg/m³)	54000 mg/m³
Canada (Quebec)	VECD (ppm)	30000 ppm
Canada (Quebec)	VEMP (mg/m³)	9000 mg/m³
Canada (Quebec)	VEMP (ppm)	5000 ppm
Alberta	OEL STEL (mg/m³)	54000 mg/m³
Alberta	OEL STEL (ppm)	30000 ppm
Alberta	OEL TWA (mg/m³)	9000 mg/m³
Alberta	OEL TWA (ppm)	5000 ppm
British Columbia	OEL STEL (ppm)	15000 ppm

This document is only controlled while on the Praxair Canada Inc. website and a copy of this controlled version is available for download. Praxair cannot assure the integrity or accuracy of any version of this document after it has been downloaded or removed from our website.

EN (English - CA) SDS ID : P-18-18750 3/9



Safety Data Sheet P-18-18750

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

Date of issue: 08-11-2016 Revision date: 07-11-2017 Supersedes: 08-11-2016

Carbon dioxide (124-38-9)		
British Columbia	OEL TWA (ppm)	5000 ppm
Manitoba	OEL STEL (ppm)	30000 ppm
Manitoba	OEL TWA (ppm)	5000 ppm
New Brunswick	OEL STEL (mg/m³)	54000 mg/m³
New Brunswick	OEL STEL (ppm)	30000 ppm
New Brunswick	OEL TWA (mg/m³)	9000 mg/m³
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/m³)	27000 mg/m³
Nunavut	OEL STEL (ppm)	15000 ppm
Nunavut	OEL TWA (mg/m³)	9000 mg/m³
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/m³)	54000 mg/m³
Québec	VECD (ppm)	30000 ppm
Québec	VEMP (mg/m³)	9000 mg/m³
Québec	VEMP (ppm)	5000 ppm
Saskatchewan	OEL STEL (ppm)	30000 ppm
Saskatchewan	OEL TWA (ppm)	5000 ppm
Yukon	OEL STEL (mg/m³)	27000 mg/m³
Yukon	OEL STEL (ppm)	15000 ppm
Yukon	OEL TWA (mg/m³)	9000 mg/m³
Yukon	OEL TWA (ppm)	5000 ppm

8.2. Appropriate engineering controls

Appropriate engineering controls

: 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

: Gloves. Face shield. Safety glasses.



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. 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.

This document is only controlled while on the Praxair Canada Inc. website and a copy of this controlled version is available for download. Praxair cannot assure the integrity or accuracy of any version of this document after it has been downloaded or removed from our website.

EN (English - CA) SDS ID : P-18-18750 4/9



Safety Data Sheet P-18-18750

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

Date of issue: 08-11-2016 Revision date: 07-11-2017 Supersedes: 08-11-2016

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).

Thermal hazard protection

Auto-ignition temperature

Solubility

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

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 : Colourless.

Odour : No data available : No data available

Odour threshold : No data available : Not applicable. рΗ pH solution No data available Relative evaporation rate (butylacetate=1) No data available Relative evaporation rate (ether=1) : Not applicable. Melting point : No data available Freezing point No data available Boiling point No data available Flash point : No data available

No data available Decomposition temperature Vapour pressure Not applicable. : No data available Vapour pressure at 50 °C Relative vapour density at 20 °C : No data available No data available Relative density Relative density of saturated gas/air mixture No data available No data available Density Relative gas density : No data available

Log Pow : Not applicable.

Log Kow : Not applicable.

Viscosity, kinematic : Not applicable.

Viscosity, dynamic : Not applicable.

Viscosity, kinematic (calculated value) (40 °C) : No data available

Explosive properties : Not applicable.

Oxidizing properties : None.

Flammability (solid, gas)

Non flammable

Water: No data available

: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity : No reactivity hazard other than the effects described in sub-sections below.

This document is only controlled while on the Praxair Canada Inc. website and a copy of this controlled version is available for download. Praxair cannot assure the integrity or accuracy of any version of this document after it has been downloaded or removed from our website.

EN (English - CA) SDS ID : P-18-18750 5/9



Safety Data Sheet P-18-18750

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

Date of issue: 08-11-2016 Revision date: 07-11-2017 Supersedes: 08-11-2016

Chemical stability : Stable under normal conditions.

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

Skin corrosion/irritation : Not classified

pH: Not applicable.

Serious eye damage/irritation : Not classified

pH: Not applicable.

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 : Not classified

exposure)

Aspiration hazard : Not classified

SECTION 12: Ecological information

12.1. Toxicity

P-18-18750

No additional information available

12.2. Persistence and degradability

Persistence and degradability	No ecological damage caused by this product.	
Methane (74-82-8)		
Persistence and degradability	The substance is biodegradable. Unlikely to persist.	
Nitrogen (7727-37-9)		
Persistence and degradability	No ecological damage caused by this product.	
Carbon dioxide (124-38-9)		
Persistence and degradability	No ecological damage caused by this product.	
12.3. Bioaccumulative potential		
P-18-18750		
Log Pow	Not applicable.	
Log Kow	Not applicable.	
Bioaccumulative potential	No ecological damage caused by this product.	
Methane (74-82-8)		
Log Pow	1.09	
Bioaccumulative potential	Not expected to bioaccumulate due to the low log Kow (log Kow < 4). Refer to section 9.	
Nitrogen (7727-37-9)		
Log Pow	Not applicable for inorganic gases.	
Log Kow	Not applicable.	
Bioaccumulative potential	No ecological damage caused by this product.	

This document is only controlled while on the Praxair Canada Inc. website and a copy of this controlled version is available for download. Praxair cannot assure the integrity or accuracy of any version of this document after it has been downloaded or removed from our website.

EN (English - CA) SDS ID : P-18-18750 6/9



Safety Data Sheet P-18-18750

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

Date of issue: 08-11-2016 Revision date: 07-11-2017 Supersedes: 08-11-2016

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.	

No ecological damage caused by this product.	
No data available.	
Not applicable.	
Not applicable.	
1.09	
Because of its high volatility, the product is unlikely to cause ground or water pollution.	
No data available.	
Not applicable for inorganic gases.	
Not applicable.	
No ecological damage caused by this product.	
Carbon dioxide (124-38-9)	
No data available.	
0.83	
Not applicable.	

No ecological damage caused by this product.

12.5. Other adverse effects

Ecology - soil

Effect on the ozone layer : None.

SECTION 13: Disposal considerations

13.1. Disposal methods

Product/Packaging disposal recommendations : Dispose of contents/container in accordance with local/regional/national/international

regulations. Contact supplier for any special requirements.

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.

Explosive Limit and Limited Quantity Index : 0.125 L

14.3. Air and sea transport

IMDG

UN-No. (IMDG) : 1956

Proper Shipping Name (IMDG) : COMPRESSED GAS, N.O.S.

Class (IMDG) : 2.2 - Non-flammable, non-toxic gases

IATA

UN-No. (IATA) : 1956

Proper Shipping Name (IATA) : COMPRESSED GAS, N.O.S.

Class (IATA) : 2

This document is only controlled while on the Praxair Canada Inc. website and a copy of this controlled version is available for download. Praxair cannot assure the integrity or accuracy of any version of this document after it has been downloaded or removed from our website.

EN (English - CA) SDS ID : P-18-18750 7/9



Safety Data Sheet P-18-18750

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

Date of issue: 08-11-2016 Revision date: 07-11-2017 Supersedes: 08-11-2016

SECTION 15: Regulatory information

15.1. National regulations

Methane (74-82-8)

Listed on the Canadian DSL (Domestic Substances List)

Nitrogen (7727-37-9)

Listed on the Canadian DSL (Domestic Substances List)

Carbon dioxide (124-38-9)

Listed on the Canadian DSL (Domestic Substances List)

15.2. International regulations

Methane (74-82-8)

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 (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)

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)

SECTION 16: Other information

Date of issue : 11/08/2016 Revision date : 11/07/2017 Supersedes : 11/08/2016

Indication of changes:

EN (English - CA)

This document is only controlled while on the Praxair Canada Inc. website and a copy of this controlled version is available for download. Praxair cannot assure the integrity or accuracy of any version of this document after it has been downloaded or removed from our website.

8/9



Safety Data Sheet P-18-18750

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

Date of issue: 08-11-2016 Revision date: 07-11-2017 Supersedes: 08-11-2016

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.

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.

The opinions expressed herein are those of qualified experts within Praxair 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 Praxair Canada Inc, it is the user's obligation to determine the conditions of safe use of the product. Praxair Canada Inc, SDSs are furnished on sale or delivery by Praxair Canada Inc, or the independent distributors and suppliers who package and sell our products. To obtain current SDSs for these products, contact your Praxair sales representative, local distributor, or supplier, or download from www.praxair.ca. If you have questions regarding Praxair SDSs, would like the document number and date of the latest SDS, or would like the names of the Praxair suppliers in your area, phone or write Praxair Canada Inc, (Phone: 1-888-257-5149; Address: Praxair Canada Inc, 1 City Centre Drive, Suite 1200, Mississauga, Ontario, L5B 1M2).

PRAXAIR and the Flowing Airstream design are trademarks or registered trademarks of Praxair Technology, Inc. in the United States and/or other countries.

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.

EN (English - CA) SDS ID : P-18-18750 9/9