

# Safety Data Sheet E-6212

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

Date of issue: 10-15-1979 Revision date: 01-26-2024 Supersedes: 09-25-2023 Version: 1.2

## **SECTION 1: Identification**

#### 1.1. Product identifier

Product form : Mixture

Product name : Argon/CO2/Inert Gas Mixture

Other means of identification : Stargon SS
Product group : Core Products

#### 1.2. Recommended use and restrictions on use

Recommended uses and restrictions : Use as directed, Industrial use

#### 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.lindecanada.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

Gases under pressure: Compressed gas H280

Simple Asphyxiant

# 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 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 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

: 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

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EN (English - CA) SDS ID : E-6212 1/12



# Safety Data Sheet E-6212

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

Date of issue: 10-15-1979 Revision date: 01-26-2024 Supersedes: 09-25-2023 Version: 1.2

can kill. Asphyxiant in high concentrations.

#### 2.4. Unknown acute toxicity (GHS CA)

Not applicable

## **SECTION 3: Composition/information on ingredients**

#### 3.1. Substances

Not applicable

## 3.2. Mixtures

| Name           | CAS No.            | % (Vol)     | Common Name (synonyms)   |
|----------------|--------------------|-------------|--|
| Argon          | (CAS No) 7440-37-1 | 1 – 99.9998 | Argon, compressed  |
| Nitrogen       | (CAS No) 7727-37-9 | 0 – 49.9999 | Nitrogen (liquified) / Nitrogen gas / Nitrogen, liquefied / NITROGEN / Nitrogen, compressed                |
| Helium         | (CAS No) 7440-59-7 | 0 – 49.9998 | Helium, compressed / Helium, liquid, non-pressurized / Helium, refrigerated liquid / Helium 3 / Helium gas |
| Carbon dioxide | (CAS No) 124-38-9  | 0.0001 - 47 | CARBON DIOXIDE   |
| Krypton        | (CAS No) 7439-90-9 | 0 – 1       | Krypton, compressed / Krypton, refrigerated liquid   |
| Neon           | (CAS No) 7440-01-9 | 0 – 1       | Neon, liquid, non-pressurized / Neon, compressed / Neon, refrigerated liquid                               |
| Xenon          | (CAS No) 7440-63-3 | 0 – 1       | Xenon, compressed / Xenon, refrigerated liquid   |

#### **SECTION 4: First-aid measures**

#### 4.1. 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 physician.

First-aid measures after skin contact

: 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 : 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

Reactivity

: 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

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

EN (English - CA) SDS ID : E-6212 2/12



# Safety Data Sheet E-6212

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

Date of issue: 10-15-1979 Revision date: 01-26-2024 Supersedes: 09-25-2023 Version: 1.2

#### 5.4. Special protective equipment and precautions for fire-fighters

Firefighting instructions : Compressed gas: asphyxiant

Suffocation hazard by lack of oxygen

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 provinced and lead fire code requisitions.

comply with their provincial and local fire code regulations.

Protection during firefighting : Compressed gas: asphyxiant. Suffocation hazard by lack of oxygen.

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

fighters.

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

: Compressed gas: asphyxiant. 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. Reverse flow into cylinder may cause rupture. Reduce gas with fog or fine water spray. Ventilate area or move container to a well-ventilated area. Before entering the area, especially a confined area, check the atmosphere with an appropriate device.

Personal Precautions, Protective Equipment and Emergency Procedures

Special protective equipment for fire fighters

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

: 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.

#### **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.

EN (English - CA) SDS ID : E-6212 3/12



## Safety Data Sheet E-6212

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

Date of issue: 10-15-1979 Revision date: 01-26-2024 Supersedes: 09-25-2023 Version: 1.2

#### 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 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.

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

| Carbon dioxide (124-38-9) |                      |             |
|---------------------------|----------------------|-------------|
| USA - ACGIH               | ACGIH OEL TWA [ppm]  | 5000 ppm    |
| USA - ACGIH               | ACGIH OEL STEL [ppm] | 30000 ppm   |
| USA - OSHA                | OSHA PEL TWA [1]     | 9000 mg/m³  |
| USA - OSHA                | OSHA PEL TWA [2]     | 5000 ppm    |
| Canada (Quebec)           | VECD (OEL STEV)      | 54000 mg/m³ |
| Canada (Quebec)           | VECD (OEL STEV)      | 30000 ppm   |
| Canada (Quebec)           | VEMP (OEL TWAEV)     | 9000 mg/m³  |
| Canada (Quebec)           | VEMP (OEL TWAEV)     | 5000 ppm    |
| Alberta                   | OEL STEL             | 54000 mg/m³ |
| Alberta                   | OEL STEL             | 30000 ppm   |
| Alberta                   | OEL TWA              | 9000 mg/m³  |
| Alberta                   | OEL TWA              | 5000 ppm    |
| British Columbia          | OEL STEL             | 15000 ppm   |
| British Columbia          | OEL TWA              | 5000 ppm    |
| Manitoba                  | OEL STEL             | 30000 ppm   |
| Manitoba                  | OEL TWA              | 5000 ppm    |
| New Brunswick             | OEL STEL             | 54000 mg/m³ |
| New Brunswick             | OEL STEL             | 30000 ppm   |
| New Brunswick             | OEL TWA              | 9000 mg/m³  |
| New Brunswick             | OEL TWA              | 5000 ppm    |
| New Foundland & Labrador  | OEL STEL             | 30000 ppm   |
| New Foundland & Labrador  | OEL TWA              | 5000 ppm    |
| Nova Scotia               | OEL STEL             | 30000 ppm   |
| Nova Scotia               | OEL TWA              | 5000 ppm    |
| Nunavut                   | OEL STEL             | 27000 mg/m³ |
| Nunavut                   | OEL STEL             | 15000 ppm   |
| Nunavut                   | OEL TWA              | 9000 mg/m³  |
| Nunavut                   | OEL TWA              | 5000 ppm    |
| Northwest Territories     | OEL STEL             | 30000 ppm   |
| Northwest Territories     | OEL TWA              | 5000 ppm    |

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EN (English - CA) SDS ID : E-6212 4/12



## Safety Data Sheet E-6212

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

Date of issue: 10-15-1979 Revision date: 01-26-2024 Supersedes: 09-25-2023 Version: 1.2

| Carbon dioxide (124-38-9) |                  |             |  |
|---------------------------|------------------|-------------|--|
| Ontario                   | OEL STEL         | 30000 ppm   |  |
| Ontario                   | OEL TWA          | 5000 ppm    |  |
| Prince Edward Island      | OEL STEL         | 30000 ppm   |  |
| Prince Edward Island      | OEL TWA          | 5000 ppm    |  |
| Québec                    | VECD (OEL STEV)  | 54000 mg/m³ |  |
| Québec                    | VECD (OEL STEV)  | 30000 ppm   |  |
| Québec                    | VEMP (OEL TWAEV) | 9000 mg/m³  |  |
| Québec                    | VEMP (OEL TWAEV) | 5000 ppm    |  |
| Saskatchewan              | OEL STEL         | 30000 ppm   |  |
| Saskatchewan              | OEL TWA          | 5000 ppm    |  |
| Yukon                     | OEL STEL         | 27000 mg/m³ |  |
| Yukon                     | OEL STEL         | 15000 ppm   |  |
| Yukon                     | OEL TWA          | 9000 mg/m³  |  |
| Yukon                     | OEL TWA          | 5000 ppm    |  |

#### 8.2. Appropriate engineering controls

Appropriate engineering controls

: Use a local exhaust system with sufficient flow velocity to maintain an adequate supply of air in the worker's breathing zone. Mechanical (general): General exhaust ventilation may be acceptable if it can maintain an adequate supply of air. 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 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.

Skin and body protection

: Wear metatarsal shoes and work gloves for cylinder handling, and protective clothing where needed. Wear appropriate chemical gloves during cylinder changeout or wherever contact with product is possible.

Respiratory protection

: Choose in accordance with provincial directives and regulations. Selection should also be based on the current CSA standards Z94.4, "Selection, care and use of respirators." Respirators should be approved by NIOSH and MSHA. 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.

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.

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EN (English - CA) SDS ID : E-6212 5/12



# Safety Data Sheet E-6212

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

Date of issue: 10-15-1979 Revision date: 01-26-2024 Supersedes: 09-25-2023 Version: 1.2

(c) Odour : Odourless.

Odour threshold : No data available
(d) Melting point : No data available
Freezing point : No data available
(e) Boiling point : No data available
(f) Flammability : Non flammable

(g) Flammability (solid, gas)

(h) Flash point
(i) Auto-ignition temperature
(j) Decomposition temperature
(k) pH
(l) Viscosity, kinematic
No data available
Not applicable
Not applicable

(m) Solubility : Water: No data available

(n) Partition coefficient - n-octanol/water [log

Pow/log Kow]

: Not applicable.

(o) Vapour pressure : Not applicable.

(p) Density

Relative gas density : 0.968 – 1.244 (r) Particle characteristics : No data available

(v) Oxidizing properties : None

(w) Relative evaporation rate (butylacetate=1)Relative evaporation rate (ether=1)Not applicable.

9.2. Other information

Gas group : Compressed gas

Additional information : None.

# **SECTION 10: Stability and reactivity**

Reactivity : 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.

Chemical stability : Stable under normal conditions.

Possibility of hazardous reactions : May occur.

Conditions to avoid : None.

Incompatible materials : None.

Hazardous decomposition products : None.

## **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

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EN (English - CA) SDS ID : E-6212 6/12



# Safety Data Sheet E-6212

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

Date of issue: 10-15-1979 Revision date: 01-26-2024 Supersedes: 09-25-2023 Version: 1.2

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

**SECTION 12: Ecological information** 

exposure)

: Not classified

#### 11.4 Toxicity

Aspiration hazard

| Argon/CO2/Inert Gas Mixture |                   |
|-----------------------------|-------------------|
| LC50 inhalation rat (ppm)   | No data available |

#### 12.1. **Toxicity** Ecology - general : No ecological damage caused by this product. 12.2. Persistence and degradability Argon/CO2/Inert Gas Mixture 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. Nitrogen (7727-37-9) Persistence and degradability No ecological damage caused by this product. Argon (7440-37-1) Persistence and degradability No ecological damage caused by this product. Helium (7440-59-7) Persistence and degradability No ecological damage caused by this product. Krypton (7439-90-9) Persistence and degradability No ecological damage caused by this product. Neon (7440-01-9) Persistence and degradability No ecological damage caused by this product. Xenon (7440-63-3) Persistence and degradability No ecological damage caused by this product 12.3. **Bioaccumulative potential** Argon/CO2/Inert Gas Mixture Log Pow Not applicable. Log Kow Not applicable. No ecological damage caused by this product. Bioaccumulative potential Carbon dioxide (124-38-9) BCF - Fish [1] (no bioaccumulation)

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EN (English - CA) SDS ID : E-6212 7/12



Safety Data Sheet E-6212 according to the Hazardous Products Regulation (February 11, 2015)

Date of issue: 10-15-1979 Revision date: 01-26-2024 Supersedes: 09-25-2023 Version: 1.2

| Carbon diavida (124 29 0)                     |  |
|---|--|
| Carbon dioxide (124-38-9)                     | 0.02   |
| Log Pow                                       | 0.83   |
| Log Kow                                       | Not applicable.  No ecological damage caused by this product.  |
| Bioaccumulative potential                     | No ecological damage caused by this product.   |
| Nitrogen (7727-37-9)                          | No. 10 de la companya |
| Log Pow                                       | Not applicable for inorganic gases.  |
| Log Kow                                       | Not applicable.  |
| Bioaccumulative potential                     | No ecological damage caused by this product.   |
| Argon (7440-37-1)                             |  |
| Log Pow                                       | Not applicable.  |
| Log Kow                                       | Not applicable.  |
| Bioaccumulative potential                     | No ecological damage caused by this product.   |
| Helium (7440-59-7)                            |  |
| Log Pow                                       | Not applicable for inorganic gases.  |
| Log Kow                                       | Not applicable.  |
| Bioaccumulative potential                     | No ecological damage caused by this product.   |
| Krypton (7439-90-9)                           |  |
| Log Pow                                       | Not applicable for inorganic gases.  |
| Bioaccumulative potential                     | No ecological damage caused by this product.   |
| Neon (7440-01-9)                              |  |
| Log Pow                                       | Not applicable for inorganic gases.  |
| Bioaccumulative potential                     | No ecological damage caused by this product.   |
| Xenon (7440-63-3)                             |  |
| 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                        |  |
|   |  |
| Argon/CO2/Inert Gas Mixture  Mobility in soil | No data available.   |
| Log Pow                                       | Not applicable.  |
| Log Kow                                       | Not applicable.  |
| Ecology - soil                                | Because of its high volatility, the product is unlikely to cause ground or water pollution.  |
| Loology son                                   | Partition into soil is unlikely.   |
| 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.   |
| Nitrogen (7727-37-9)                          |  |
| Mobility in soil                              | No data available.   |
| Log Pow                                       | Not applicable for inorganic gases.  |
| Log Kow                                       | Not applicable.  |
| Ecology - soil                                | No ecological damage caused by this product.   |
| Argon (7440-37-1)                             |  |
| Mobility in soil                              | No data available.   |
| Log Pow                                       | Not applicable.  |
| Log Kow                                       | Not applicable.  |
| Ecology - soil                                | No ecological damage caused by this product.   |
|   | 1.15 Source Commission States of the product   |
| Helium (7440-59-7) Mobility in soil           | No data available.   |
| Log Pow                                       | Not applicable for inorganic gases.  |
| LOGIOW  | The applicable for illorganic gases.   |

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SDS ID : E-6212 EN (English - CA) 8/12



# Safety Data Sheet E-6212

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

Date of issue: 10-15-1979 Revision date: 01-26-2024 Supersedes: 09-25-2023 Version: 1.2

| Helium (7440-59-7)  |  |  |
|---------------------|--|--|
| Log Kow             | Not applicable.                              |  |
| Ecology - soil      | No ecological damage caused by this product. |  |
| Krypton (7439-90-9) |  |  |
| Log Pow             | Not applicable for inorganic gases.          |  |
| Ecology - soil      | No ecological damage caused by this product. |  |
| Neon (7440-01-9)    |  |  |
| Log Pow             | Not applicable for inorganic gases.          |  |
| Ecology - soil      | No ecological damage caused by this product. |  |
| Xenon (7440-63-3)   |  |  |
| Mobility in soil    | No data available.                           |  |
| Log Pow             | Not applicable for inorganic gases.          |  |
| Log Kow             | Not applicable.                              |  |
| Ecology - soil      | No ecological damage caused by this product. |  |

#### 12.5. Other adverse effects

Effect on the ozone layer : None.
Effect on global warming : None.

## **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**

#### 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 Gases

Proper shipping name : COMPRESSED GAS, N.O.S.

Explosive Limit and Limited Quantity Index : 0.125 L Passenger Carrying Road Vehicle or Passenger : 75 L

Carrying Railway Vehicle Index

#### 14.2. 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

MFAG-No : 121

**IATA** 

UN-No. (IATA) : 1956

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

Class (IATA) : 2 - Gases

## SECTION 15: Regulatory information

#### 15.1. National regulations

#### Argon/CO2/Inert Gas Mixture

Listed on the Canadian DSL (Domestic Substances List)

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EN (English - CA) SDS ID : E-6212 9/12



# Safety Data Sheet E-6212

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

Date of issue: 10-15-1979 Revision date: 01-26-2024 Supersedes: 09-25-2023 Version: 1.2

#### Carbon dioxide (124-38-9)

Listed on the Canadian DSL (Domestic Substances List)

#### Nitrogen (7727-37-9)

Listed on the Canadian DSL (Domestic Substances List)

#### Argon (7440-37-1)

Listed on the Canadian DSL (Domestic Substances List)

#### Helium (7440-59-7)

Listed on the Canadian DSL (Domestic Substances List)

## Krypton (7439-90-9)

Listed on the Canadian DSL (Domestic Substances List)

#### Neon (7440-01-9)

Listed on the Canadian DSL (Domestic Substances List)

#### Xenon (7440-63-3)

Listed on the Canadian DSL (Domestic Substances List)

#### 15.2. International regulations

#### Argon/CO2/Inert Gas Mixture

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)

# 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)

#### Argon (7440-37-1)

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 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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EN (English - CA) SDS ID : E-6212 10/12



# Safety Data Sheet E-6212

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

Date of issue: 10-15-1979 Revision date: 01-26-2024 Supersedes: 09-25-2023 Version: 1.2

#### Helium (7440-59-7)

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)

#### Krypton (7439-90-9)

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 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)

#### Neon (7440-01-9)

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)

#### Xenon (7440-63-3)

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)

# **SECTION 16: Other information**

 Date of issue
 : 15/10/1979

 Revision date
 : 26/01/2024

 Supersedes
 : 25/09/2023

Indication of changes:

Training advice : The hazard of asphyxiation is often overlooked and must be stressed during operator training.

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.lindecanada.ca.

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EN (English - CA) SDS ID : E-6212 11/12



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NFPA health hazard

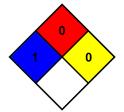
NFPA fire hazard NFPA instability

: 1 - Exposure could cause irritation but only minor residual injury even if no treatment is given.

: 0 - Materials that will not burn.

: 0 - Normally stable, even under fire exposure conditions,

and are not reactive with water.



HMIS III Rating

Physical

: 0 Minimal Hazard - No significant risk to health Health Flammability

: 0 Minimal Hazard - Materials that will not burn

: 3 Serious Hazard - Materials that may form explosive mixtures with water and are capable of detonation or explosive reaction in the presence of a strong initiating source. Materials may polymerize, decompose, self-react, or undergo other chemical change at normal temperature and pressure with moderate risk of explosion

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.

SDS ID: E-6212 EN (English - CA) 12/12