



## Safety Data Sheet

This safety data sheet complies with the requirements of: WHIMS 2015

Product name Carbon Dioxide

### 1. Identification of the Substance/Preparation and of the Company/Undertaking

#### Product Identifier

Product name Carbon Dioxide

#### Other means of identification

Product code 004523

UN/ID no UN1013

Synonyms None

#### Recommended use of the chemical and restrictions on use

Recommended use Fire extinguishing agent

Uses advised against None known

#### Details of the Supplier of the Safety Data Sheet

##### Initial Supplier Identifier

Johnson Controls  
Canadian Distribution Centre  
20 Delta Park Blvd  
Brampton ON L6T 5E7  
Telephone: 1-888-888-7838

##### Emergency Telephone Number

Emergency telephone CHEMTREC 001-800-424-9300 or 001-703-527-3887

### 2. Hazards Identification

#### Classification

Gases under pressure Simple asphyxiants	Liquefied gas
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#### Label Elements

##### **WARNING**

##### **Hazard statements**

Contains gas under pressure; may explode if heated  
May displace oxygen and cause rapid suffocation



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**Precautionary Statements - Storage**

Protect from sunlight. Store in a well-ventilated place

**OTHER INFORMATION**

**3. Composition/information on Ingredients**

**Substance**

Chemical name	CAS No.	weight-%	Hazardous Material Information Review Act registry number (HMIRA registry #)	Date HMIRA filed and date exemption granted (if applicable)
Carbon Dioxide	124-38-9	90 - 100%	-	-

**4. First aid measures**

**Description of first aid measures**

<b>Inhalation</b>	Remove to fresh air.
<b>Eye contact</b>	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.
<b>Skin contact</b>	In case of contact with liquefied gas, thaw frosted parts with lukewarm water.
<b>Ingestion</b>	Clean mouth with water and drink afterwards plenty of water.

**Most Important Symptoms and Effects, Both Acute and Delayed**

**Symptoms** No information available.

**Indication of Any Immediate Medical Attention and Special Treatment Needed**

**Note to physicians** Treat symptomatically.

**5. Fire-fighting measures**

**Suitable Extinguishing Media** Use extinguishing measures that are appropriate to local circumstances and the



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surrounding environment.

**Unsuitable extinguishing media** Do not extinguish a leaking gas fire unless leak can be stopped.

**Specific hazards arising from the chemical** Cylinders may rupture under extreme heat. Damaged cylinders should be handled only by specialists. Containers may explode when heated. Ruptured cylinders may rocket.

**Hazardous Combustion Products** Carbon oxides.

**Explosion Data**

**Sensitivity to Mechanical Impact** yes.

**Sensitivity to Static Discharge** None.

**Special protective equipment for fire-fighters** Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

## 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

**Personal precautions** CONTENTS UNDER PRESSURE. Empty containers pose a potential fire and explosion hazard. Do not cut, puncture of weld containers.

### Environmental Precautions

**Environmental precautions** See Section 12 for additional Ecological Information.

### Methods and material for containment and cleaning up

**Methods for containment** Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up** Pick up and transfer to properly labeled containers.

**Prevention of secondary hazards** Clean contaminated objects and areas thoroughly observing environmental regulations.

## 7. Handling and Storage

### Precautions for Safe Handling

**Advice on safe handling** CONTENTS UNDER PRESSURE. Empty containers pose a potential fire and explosion hazard. Do not cut, puncture of weld containers.

### Conditions for safe storage, including any incompatibilities

**Storage Conditions** Keep containers tightly closed in a dry, cool and well-ventilated place. Protect from sunlight.

## 8. Exposure Controls/Personal Protection

### Control Parameters

**Exposure Limits** .



Chemical name	Alberta	British Columbia	Ontario TWA	Quebec
Carbon Dioxide 124-38-9	TWA: 5000 ppm TWA: 9000 mg/m <sup>3</sup> STEL: 30000 ppm STEL: 54000 mg/m <sup>3</sup>	TWA: 5000 ppm STEL: 15000 ppm	TWA: 5000 ppm STEL: 30000 ppm	TWA: 5000 ppm TWA: 9000 mg/m <sup>3</sup> STEL: 30000 ppm STEL: 54000 mg/m <sup>3</sup>

**OTHER INFORMATION** None known.

### Appropriate Engineering Controls

**Engineering controls** Ensure adequate ventilation, especially in confined areas.

### Individual protection measures, such as personal protective equipment

**Eye/face protection** No special protective equipment required.

**Skin and body protection** No special protective equipment required.

**Respiratory protection** No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

**Ventilation** Use local exhaust or general dilution ventilation to control exposure with applicable limits

**General hygiene considerations** Handle in accordance with good industrial hygiene and safety practice.

## 9. Physical and Chemical Properties

### Information on basic physical and chemical properties

<b>Physical State</b>	Compressed Gas
<b>Appearance</b>	No data available
<b>Color</b>	No data available
<b>Odor</b>	None
<b>Odor Threshold</b>	No data available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
<b>pH</b>	No data available	No data available
<b>Melting point/freezing point</b>	No data available	No data available
<b>Boiling point / boiling range</b>	No data available	No data available
<b>Flash Point</b>	No data available	No data available
<b>Evaporation Rate</b>	No data available	No data available
<b>Flammability (solid, gas)</b>		No data available
<b>Flammability limit in air</b>		No data available
<b>Upper flammability limit:</b>	No data available	
<b>Lower flammability limit:</b>	No data available	
<b>Vapor Pressure</b>	No data available	No data available
<b>Vapor Density</b>	No data available	No data available
<b>Relative Density</b>		No data available
<b>Water Solubility</b>	No data available	No data available
<b>Solubility in Other Solvents</b>	No data available	No data available
<b>Partition coefficient</b>	No data available	No data available
<b>Autoignition Temperature</b>	No data available	No data available
<b>Decomposition Temperature</b>	No data available	No data available
<b>Kinematic viscosity</b>	No data available	No data available



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Dynamic viscosity No data available No data available  
Explosive properties No data available.  
Oxidizing properties No data available.

**OTHER INFORMATION**

softening point No data available  
Molecular Weight No data available  
VOC content (%) No data available  
Density No data available  
Bulk Density No data available

**10. Stability and Reactivity**

Reactivity No information available.  
Chemical Stability Stable under normal conditions.  
Possibility of hazardous reactions None under normal processing.  
Hazardous Polymerization Hazardous polymerization does not occur.  
Conditions to Avoid Excessive heat.  
Incompatible Materials None known based on information supplied.  
Hazardous decomposition products Carbon oxides.

**11. Toxicological Information**

**Information on Likely Routes of Exposure**

**Product Information**

Inhalation Specific test data for the substance or mixture is not available.  
Eye contact Specific test data for the substance or mixture is not available.  
Skin contact Specific test data for the substance or mixture is not available.  
Ingestion Specific test data for the substance or mixture is not available.

**Information on Toxicological Effects**

Symptoms No information available.

**Numerical Measures of Toxicity**

**Acute Toxicity**

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

Skin corrosion/irritation No information available.



Serious eye damage/eye irritation	No information available.
Respiratory or skin sensitization	No information available.
Germ cell mutagenicity	No information available.
Carcinogenicity	No information available.
Reproductive toxicity	No information available.
STOT - single exposure	No information available.
STOT - repeated exposure	No information available.
Target organ effects	Central Vascular System (CVS), Respiratory System.
Aspiration hazard	No information available.

**12. Ecological Information**

Ecotoxicity	The environmental impact of this product has not been fully investigated.
Persistence and Degradability	No information available.
Bioaccumulation	No information available.
Other Adverse Effects	No information available.

**13. Disposal Considerations**

**Waste Treatment Methods**

Waste from residues/unused products	Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.
Contaminated packaging	Do not reuse empty containers.

**14. Transport Information**

<b>TDG</b>	
UN/ID no	UN1013
Proper Shipping Name	Carbon dioxide
Hazard class	2.2
Description	UN1013, Carbon dioxide, 2.2

<b>MEX</b>	
UN/ID no	UN1013
Proper Shipping Name	Carbon dioxide



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**Hazard class** 2.2  
**Description** UN1013, Carbon dioxide, 2.2

**ICAO (air)**

**UN/ID no** UN1013  
**Proper Shipping Name** Carbon dioxide  
**Hazard class** 2.2  
**Description** UN1013, Carbon dioxide, 2.2

**IATA**

**UN/ID no** UN1013  
**Hazard class** 2.2  
**ERG Code** 2L  
**Description** UN1013, Carbon dioxide, 2.2

**IMDG**

**UN/ID no** UN1013  
**Hazard class** 2.2  
**EmS-No** F-C, S-V  
**Description** UN1013, Carbon dioxide, 2.2

**RID**

**UN/ID no** UN1013  
**Proper Shipping Name** Carbon dioxide  
**Hazard class** 2.2  
**Classification Code** 2A  
**Description** UN1013, Carbon dioxide, 2.2 (13)  
**Labels** 2.2 (+13)

**ADR**

**UN/ID no** UN1013  
**Proper Shipping Name** Carbon dioxide  
**Hazard class** 2.2  
**Classification Code** 2A  
**Tunnel restriction code** (C/E)  
**Special Provisions** 584, 653  
**Description** UN1013, Carbon dioxide, 2.2, (C/E)  
**Labels** 2.2

**ADN**

**Proper Shipping Name** Carbon dioxide  
**Hazard class** 2.2  
**Classification Code** 2A  
**Special Provisions** 584, 653  
**Description** UN1013, Carbon dioxide, 2.2  
**Hazard label(s)** 2.2  
**Limited Quantity (LQ)** 120 ml

**15. Regulatory Information**

**REGULATORY INFORMATION**

**International regulations**

**Ozone-depleting substances (ODS)** Not Applicable

**Persistent Organic Pollutants** Not Applicable



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Export Notification requirements Not Applicable

**International Inventories**

TSCA	Complies
DSL/NDSL	Complies
ENCS	Complies
IECSC	Complies
KECL	Complies
PICCS	Complies
AICS	Complies

**Legend:**

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory  
**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List  
**ENCS** - Japan Existing and New Chemical Substances  
**IECSC** - China Inventory of Existing Chemical Substances  
**KECL** - Korean Existing and Evaluated Chemical Substances  
**PICCS** - Philippines Inventory of Chemicals and Chemical Substances  
**AICS** - Australian Inventory of Chemical Substances

**16. Other information, including date of preparation of the last revision**

<b>NFPA</b>	Health Hazards 0	Flammability 0	Instability 0	Physical and chemical properties -
<b>HMIS</b>	Health Hazards 0	Flammability 0	Physical Hazards 3	Personal Protection X

Revision date 09-Nov-2022

Revision note No information available.

**Disclaimer**

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End of Safety Data Sheet