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

Label Elements

WARNING

Hazard statements

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

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

Inhalation Remove to fresh air.

Eye contact Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.

Skin contact In case of contact with liquefied gas, thaw frosted parts with lukewarm water.

Ingestion 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

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/m³ STEL: 30000 ppm STEL: 54000 mg/m³	TWA: 5000 ppm STEL: 15000 ppm	TWA: 5000 ppm STEL: 30000 ppm	TWA: 5000 ppm TWA: 9000 mg/m³ STEL: 30000 ppm STEL: 54000 mg/m³

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

Physical State	Compressed Gas
Appearance	No data available
Color	No data available
Odor	None
Odor Threshold	No data available

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

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

TDG

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

MEX

UN/ID no	UN1013
Proper Shipping Name	Carbon dioxide

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

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

NFPA	**Health Hazards** 0	**Flammability** 0	**Instability** 0	**Physical and chemical properties** -
HMIS	**Health Hazards** 0	**Flammability** 0	**Physical Hazards** 3	**Personal Protection** X

Revision date 09-Nov-2022
Revision note No information available.
Disclaimer
The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet