

# SAFETY DATA SHEET

According to Safe Work Australia

Printing date 06.02.2025

Revision: 06.02.2025

## 1 . IDENTIFICATION: PRODUCT IDENTIFIER AND CHEMICAL IDENTITY

**Product Name:** CARBON DIOXIDE**Part Number:** 216012**Recommended Use of the Chemical and Restriction on Use:**

Food additive to charge/refrigerate drinks with gas, CO2 enrichment in aquariums, technical gas - industrial use.

**Details of Manufacturer or Importer:**Adventure Trading Australia Pty Ltd  
71 Charles Ulm Place  
Eagle Farm QLD 4009**Phone Number:** (07) 3193 1110**Emergency telephone number:** National Poison Information Centre: 13 11 26

## 2 . HAZARDS IDENTIFICATION

**Hazardous Nature:**

Classified as Hazardous according to the Globally Harmonised System of Classification and Labelling of Chemicals (GHS) and Safe Work Australia criteria.

Classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail (7th edition).



gas cylinder

Press. Gas C H280 Contains gas under pressure; may explode if heated.

**Signal Word** Warning**Hazard Statements**

H280 Contains gas under pressure; may explode if heated.

**Precautionary Statements**

P410+P403 Protect from sunlight. Store in a well-ventilated place.

## 3 . COMPOSITION AND INFORMATION ON INGREDIENTS

**Chemical Characterization: Mixtures****Description:** Mixture of substances listed below with nonhazardous additions.**Hazardous Components:**

124-38-9	Carbon dioxide	 Press. Gas L, H280	≥99.99%
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## 4 . FIRST AID MEASURES

**Inhalation:**

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Seek medical attention if breathing problems develop.

**Skin Contact:**

In case of skin contact, immediately remove contaminated clothing and wash affected areas with water and soap. In case of lesions due to low temperature, do not rub the skin or break blisters. Place the effected body parts in lukewarm water. Seek medical attention if symptoms occur.

**Eye Contact:**

In case of eye contact, hold eyelids open and rinse with water for at least 15 minutes. Seek medical attention if symptoms occur.

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**Ingestion:**

Ingestion is not considered a potential route of exposure.

If swallowed, do not induce vomiting. Do not give anything by mouth to an unconscious person. Seek medical attention if symptoms occur.

**Symptoms Caused by Exposure:**

Inhalation: Low concentrations may cause rapid breathing, cyanosis and narcotic effects including dizziness, headaches, nausea, vomiting and incoordination. May cause asphyxiation in high concentrations. Symptoms may include loss of mobility and unconsciousness. Victims may not be aware of asphyxiation.

Skin Contact: Contact with skin may cause cold burns.

Eye Contact: Contact with eyes may cause cold burns.

### 5 . FIRE FIGHTING MEASURES

**Suitable Extinguishing Media:** Use fire extinguishing methods suitable to surrounding conditions.

**Specific Hazards Arising from the Chemical:**

Closed containers may explode when exposed to extreme heat. Containers close to fire should be removed if safe to do so. Use water spray to cool fire exposed containers.

**Special Protective Equipment and Precautions for Fire Fighters:**

When fighting a major fire wear self-contained breathing apparatus and protective equipment.

### 6 . ACCIDENTAL RELEASE MEASURES

**Personal Precautions, Protective Equipment and Emergency Procedures:**

Not required.

Wear approved self-contained breathing apparatus and full protective clothing. Evacuate all non-essential personnel from affected area. Do not breathe vapours. Ensure adequate ventilation.

**Environmental Precautions:**

In the event of a major spill, prevent spillage from entering drains or water courses.

**Methods and Materials for Containment and Cleaning Up:** Ensure adequate ventilation.

### 7 . HANDLING AND STORAGE

**Precautions for Safe Handling:**

Use of safe work practices are recommended to avoid eye or skin contact and inhalation of vapours. Use only outdoors or in a well-ventilated area.

Food, beverages and tobacco products should not be stored or consumed where this material is in use. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storage or re-use. Provide eyewash fountains and safety showers in close proximity to points of potential exposure.

**Conditions for Safe Storage:**

Store in a cool, dry and well ventilated area. Protect from sunlight. Do not expose to temperatures exceeding 50 °C. Ensure adequate ventilation. Keep away from ammonia and amines. Take care when handling containers to avoid physical damage to the cylinder. Do not allow backfeed into the cylinder. Do not allow suck back of water into the cylinder. Do not completely empty the cylinder.

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### 8 . EXPOSURE CONTROLS AND PERSONAL PROTECTION

#### Exposure Standards:

#### 124-38-9 Carbon dioxide

NES	STEL: 54000 mg/m <sup>3</sup> , 30000 ppm TWA: 9000 *22500 mg/m <sup>3</sup> , 5000 *12500 ppm *in coal mines
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#### Engineering Controls:

Maintain air concentration below occupational exposure standards, providing adequate ventilation.

#### Respiratory Protection:

Use a approved respirator under conditions where exposure to the substance is apparent (e.g. generation of high concentrations of mist or vapour, inadequate ventilation, development of respiratory tract irritation) and engineering controls are not feasible. See Australian Standards AS/NZS 1715 and 1716 for more information.

#### Skin Protection:

Leather, wool or aramid blend gauntlets. See Australian/New Zealand Standard AS/NZS 2161 for more information.

Occupational protective clothing (depending on conditions in which it has to be used, in particular as regards the period for which it is worn, which shall be determined on the basis of the seriousness of the risk, the frequency of exposure to the risk, the characteristics of the workstation of each worker and the performance of the protective clothing). See Australian/New Zealand Standard AS/NZS 4501 for more information.

#### Eye and Face Protection:

Eye and face protectors for protection against gas. See Australian/New Zealand Standard AS/NZS 1337.

### 9 . PHYSICAL AND CHEMICAL PROPERTIES

#### Appearance:

<b>Form:</b>	Compressed gas
<b>Colour:</b>	Colourless
<b>Odour:</b>	Odourless
<b>Odour Threshold:</b>	No information available
<b>pH-Value:</b>	3.7 (for carbonic acid)
<b>Melting point/Melting range:</b>	-78.5 °C (sublimation point)
<b>Initial Boiling Point/Boiling Range:</b>	-78.5 °C (sublimation point)
<b>Flash Point:</b>	Not applicable
<b>Flammability:</b>	Product is not flammable.
<b>Auto-ignition Temperature:</b>	Not applicable
<b>Decomposition Temperature:</b>	No information available
<b>Explosion Limits:</b>	
<b>Lower:</b>	No information available
<b>Upper:</b>	No information available
<b>Vapour Pressure at 20 °C:</b>	57300 hPa
<b>Relative Density:</b>	1.03
<b>Vapour Density:</b>	1.52
<b>Evaporation Rate:</b>	No information available
<b>Solubility in Water at 15 °C:</b>	2000 mg/L (at 1.013 bar)
<b>Partition Coefficient (n-octanol/water):</b>	Not applicable
<b>Viscosity:</b>	Not applicable

### 10 . STABILITY AND REACTIVITY

**Possibility of Hazardous Reactions:** Hazardous polymerisation will not occur.

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**Chemical Stability:** Stable at ambient temperature and under normal conditions of use.**Conditions to Avoid:** Extreme temperatures.**Incompatible Materials:** This product may react with some substances, such as ammonia or amines.**Hazardous Decomposition Products:** No hazardous decomposition products known.

### 11 . TOXICOLOGICAL INFORMATION

**Toxicity:****Acute Health Effects****Inhalation:**

Low concentrations may cause rapid breathing, cyanosis and narcotic effects including dizziness, headaches, nausea, vomiting and incoordination. May cause asphyxiation in high concentrations. Symptoms may include loss of mobility and unconsciousness. Victims may not be aware of asphyxiation.

**Skin:** Contact with skin may cause cold burns.**Eye:** Contact with eyes may cause cold burns.**Ingestion:** Ingestion is not considered a potential route of exposure.**Skin Corrosion / Irritation:** Based on classification principles, the classification criteria are not met.**Serious Eye Damage / Irritation:** Based on classification principles, the classification criteria are not met.**Respiratory or Skin Sensitisation:** Based on classification principles, the classification criteria are not met.**Germ Cell Mutagenicity:** Based on classification principles, the classification criteria are not met.**Carcinogenicity:** This product does NOT contain any IARC listed chemicals.**Reproductive Toxicity:** Based on classification principles, the classification criteria are not met.**Specific Target Organ Toxicity (STOT) - Single Exposure:**

Based on classification principles, the classification criteria are not met.

**Specific Target Organ Toxicity (STOT) - Repeated Exposure:**

Based on classification principles, the classification criteria are not met.

**Aspiration Hazard:** Based on classification principles, the classification criteria are not met.**Chronic Health Effects:** No information available**Existing Conditions Aggravated by Exposure:** No information available**Additional toxicological information:**

Concentrations of 5000 ppm in air can cause health problems after 8 hours of exposure. 15000 ppm can cause problems in 10 minutes.

concentrations greater than 20000 ppm can cause headaches and loss of concentration. Concentrations greater than 10 % in air can cause asphyxiation and respiratory paralysis. Higher concentrations of carbon dioxide can cause immediate loss of consciousness and death.

### 12 . ECOLOGICAL INFORMATION

**Persistence and Degradability:** No information available**Bioaccumulative Potential:**

No information available

This product has a low bioaccumulative potential.

**Mobility in Soil:** No information available**Other adverse effects:** Carbon dioxide is a major contributor to the greenhouse effect.

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## 13 . DISPOSAL CONSIDERATIONS

**Disposal Methods and Containers:** Dispose according to applicable local and state government regulations.

**Special Precautions for Landfill or Incineration:**

## 14 . TRANSPORT INFORMATION

<b>UN Number</b> ADG, IMDG, IATA	UN1013
<b>Proper Shipping Name</b> ADG, IMDG, IATA	CARBON DIOXIDE
<b>Dangerous Goods Class</b> ADG Class:	2.2
<b>Packing Group:</b> ADG, IMDG, IATA	Void
<b>EMS Number:</b>	F-C,S-V
<b>Hazchem Code:</b>	2T
<b>Limited Quantities:</b>	120 ml
<b>Substance in IBC:</b>	2000

## 15 . REGULATORY INFORMATION

**Australian Inventory of Chemical Substances:**

124-38-9	Carbon dioxide
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**Standard for the Uniform Scheduling of Drugs and Poisons (SUSMP) - Poison Schedule:**  
Not Scheduled.

## 16 . OTHER INFORMATION

**Date of Preparation or Last Revision:** 06.02.2025

**Prepared by:** MSDS.COM.AU Pty Ltd

[www.msds.com.au](http://www.msds.com.au)

**Abbreviations and acronyms:**

ADG: Australian Dangerous Goods  
 IMDG: International Maritime Code for Dangerous Goods  
 IATA: International Air Transport Association  
 GHS: Globally Harmonised System of Classification and Labelling of Chemicals  
 CAS: Chemical Abstracts Service (division of the American Chemical Society)  
 IARC: International Agency for Research on Cancer  
 STEL: Short Term Exposure Limit  
 TWA: Time Weighted Average  
 NES: National Exposure Standard (Safe Work Australia - Workplace Exposure Standards For Airborne Contaminants)  
 Press. Gas C: Gases under pressure: Compressed gas  
 Press. Gas L: Gases under pressure: Liquefied gas

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**Disclaimer**

This SDS is prepared in accord with the Safe Work Australia document "Code of Practice for the Preparation of Safety Data Sheets for Hazardous Chemicals - July 2020"

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