Company Logo

SAFETY DATA SHEET

According to
HSNO Hazardous Substances (Safety Data Sheets) Notice 2017

Section 1. Identification of the material and the supplier

Product:	**CO2 Fire Extinguisher**
Product Use:	Fire Extinguishing Agent
Restriction of Use:	Refer to Section 15
New Zealand Supplier:	**Safeworld Limited**
Address:	17 Fairfax Avenue Penrose Auckland, 1061
Telephone:	+64 9 218 9403
Emergency No:	**0800 764 766 (National Poison Centre)**
Date of SDS Preparation:	7 November 2025

Section 2. Hazards Identification

This substance is NOT hazardous according to the EPA Hazardous Substances (Classification) Notice 2020

Pictograms

Signal Word: **Warning**

GHS Classification and Category	Hazard Code	Hazard Statement
Liquified Gas	H280	Contains gas under pressure may explode if heated.

Prevention Code	Prevention Statement
P103	Read carefully and follow all instructions.

Response Code	Response Statement
None Allocated	

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

Disposal Code	Disposal Statement
P501	Dispose of according to Local Regulations or Authorities

Section 3. Composition / Information on Hazardous Ingredients

Ingredients	Wt%	CAS NUMBER.
Carbon Dioxide	>99%	124-38-9

Section 4. First Aid Measures

Routes of Exposure:

If in Eyes	Rinse cautiously with water for several minutes. Seek medical attention if needed.
If on Skin	Wash skin with plenty of water. If skin irritation occurs: Get medical advice/ attention.
If Swallowed	Rinse mouth. Never give anything to the mouth of an unconscious person. Seek medical attention if needed.
If Inhaled	Remove victim to uncontaminated area wearing self contained breathing apparatus. Keep victim warm and rested. Call a doctor. Apply artificial respiration if breathing stopped.

Most important symptoms and effects, both acute and delayed

Symptoms: In high concentration may cause asphyxiation. Symptoms may include loss of mobility/consciousness. Victim may not be aware of asphyxiation. Low concentration of CO2 cause increased respiration and headache.

Section 5. Fire Fighting Measures

Hazard Type	Non-Flammable. Exposure to fire may cause containers to rupture/explode
Hazards from combustion products	None known.
Suitable Extinguishing media	All known extinguisher can be used. If possible, stop flow of products.
Precautions for firefighters and special protective clothing	In confined space use self-contained breathing apparatus.
HAZCHEM CODE	**2T**

Section 6. Accidental Release Measures

For emergency responders:
Wear PPE as detailed in Section 8. Ensure adequate ventilation, especially in confined areas.

Environmental precautions:
Try to stop release. Prevent from entering sewers, basements and workpits, or any place where its accumulation can be dangerous.

Methods and material for containment and cleaning up:
Pick up and transfer to properly labelled containers. Dispose as per Section 13.

Section 7. Handling and Storage

Precautions for Handling and Storage:

- Storage temperature: -30C -+65C, dry and free from vibrations.
- Suck back of water into the container must be prevented.
- Do not allow back feed into the container.
- Use only properly specified equipment which is suitable for this product, its supply pressure and temperature.
- Contact your gas supplier if in doubt. Refer to supplier's container handling instructions.

Section 8 Exposure Controls / Personal Protection

WORKPLACE EXPOSURE STANDARDS (provided for guidance only)

Substance		TWA ppm	TWA mg/m³	STEL ppm	STEL mg/m³
Carbon dioxide	[124-38-9]	5000	9000	30000	54000

Workplace Exposure Standard – Time Weighted Average (WES-TWA). The time-weighted average exposure standard designed to protect the worker from the effects of long-term exposure. Workplace Exposure Standard – Short-Term Exposure Limit (WESSTEL). The 15-minute average exposure standard. Applies to any 15- Minute period in the working day and is designed to protect the worker against adverse effects of irritation, chronic or irreversible tissue change, or narcosis that may increase the likelihood of accidents. The WES-STEL is not an alternative to the WES-TWA; both the short-term and time-weighted average exposures apply. Workplace Exposure Standards and Biological Exposure Indices Feb 2025 15TH EDITION.

Engineering Controls
Ensure adequate ventilation.

Personal Protection Equipment

Eyes	Tight sealing safety goggles.
Skin	Wear protective gloves and protective clothing.
Respiratory	If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn.
General Hygiene	Ensure adequate ventilation.

Section 9 Physical and Chemical Properties

Appearance	Liquid Gas
Colour	Colourless
Odour	None
Odour Threshold	Not available
pH	Not available
Boiling Point	-78.5 °C
Melting/Freezing Point	-56.6 °C
Critical temperature [C]	30
Flash Point	Not available
Flammability	Not flammable
Upper and Lower Explosive Limits	Not available
Vapour Pressure	57.3bar (20^0C)
Vapour Density	Not available
Relative Density, gas	1.52 (air=1)
Relative Density, liquid	0.82 (water=1)
Specific Gravity	Not available
Water Solubility	2000 mg/L
Partition Coefficient:	Not available
Auto-ignition Temperature	Not available
Decomposition Temperature	Not available
Viscosity	Not available
Other data	Gas/vapour heavier than air. May accumulate in confined spaces, particularly at or below ground level.

Section 10. Stability and Reactivity

Stability of Substance	This product is stable under normal conditions.

Possibility of hazardous reactions	None under normal processing.
Conditions to Avoid	Extremes of temperature and direct sunlight.
Incompatible Materials	Strong oxidising agents. Strong acids. Strong bases.
Hazardous Decomposition Products	No data available.

Section 11 Toxicological Information

Acute Effects:

Swallowed	This product is not classified as acutely toxic.
Dermal	This product is not classified as acutely toxic.
Inhalation	This product is not classified as acutely toxic. In high concentrations cause rapid circulatory insufficiency. Symptoms are headache, nausea and vomiting, which may lead to unconsciousness.
Eye	This product is not classified as an eye irritant/corrosive.
Skin	This product is not classified as a skin irritant/corrosive.

Chronic Effects:

Carcinogenicity	This product is not classified as carcinogenic.
Reproductive Toxicity	This product is not classified as toxic for reproduction.
Germ Cell Mutagenicity	This product is not classified as mutagenic.
Aspiration	This product is not classified as Asp Tox.
STOT/SE	This product is not classified as STOT SE.
STOT/RE	This product is not classified as STOT RE.

Section 12. Ecotoxicological Information

The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.

Product:	
Persistence and degradability	No data available
Bioaccumulation	No data available
Mobility in Soil	No data available
Other adverse effects	No data available

Section 13. Disposal Considerations

Disposal Method:
Do not discharge into any place where its accumulation could be dangerous. To atmosphere in a well-ventilated place. Discharge to atmosphere in large quantities should be avoided. Contact supplier if guidance is required.
Precautions or methods to avoid: None known.

Section 14 Transport Information

This product is classified as a Dangerous Good for transport in NZ ; NZS 5433:2020 and SNZ HB 5433:2021

Road, Rail, Sea and Air Transport

UN No	1013
Class - Primary	2.2
Packing Group	n/a
Proper Shipping Name	CARBON DIOXIDE
Marine Pollutant	No
Special Provisions	If the product's individual container is below 500ml, it can be transported as a non-DG as long as the product packaging is still labelled as per DG requirements and the driver is given safety information in accordance with Chapter 3.4 of the UNRTDG.

Section 15 Regulatory Information

This substance is NOT classified hazardous according to the EPA Hazardous Substances (Classification) Notice 2020

Section 16 Other Information

Glossary

Cat	Category
EC_{50}	Median effective concentration.
EEL	Environmental Exposure Limit.
EPA	Environmental Protection Authority
HSNO	Hazardous Substances and New Organisms.
HSW	Health and Safety at Work.
LC_{50}	Lethal concentration that will kill 50% of the test organisms inhaling or ingesting it.
LD_{50}	Lethal dose to kill 50% of test animals/organisms.
LEL	Lower explosive level.
OSHA	American Occupational Safety and Health Administration.
TEL	Tolerable Exposure Limit.
TLV	Threshold Limit Value-an exposure limit set by responsible authority.
UEL	Upper Explosive Level
WES	Workplace Exposure Limit

References:

1. EPA Hazardous Substances (Safety Data Sheets) Notice 2017
2. Workplace Exposure Standards and Biological Exposure Indices Feb 2025 15th edition.
3. Assigning a hazardous substance to a HSNO Approval (Aug 2013).
4. Transport of Dangerous goods on land NZS 5433:2020
5. HSW (Hazardous Substances) Regulations 2017

Disclaimer

This document has been prepared by TCC (NZ) Ltd and serves as the suppliers Safety Data Sheet ('SDS'). It is based on information concerning the product which has been provided to TCC (NZ) Ltd or obtained from third party sources and is believed to represent the current state of knowledge as to the appropriate safety and handling precautions for the product at the time of issue. Further clarification regarding any aspect of the product should be obtained directly from the manufacturer. While TCC (NZ) have taken all due care to include accurate and up-to-date information in this SDS, it does not provide any warranty as to accuracy or completeness. As far as lawfully possible, TCC (NZ) Ltd accept no liability for any loss, injury or damage (including consequential loss) which may be suffered or incurred by any person as a consequence of their reliance on the information contained in this SDS

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Please contact the New Zealand distributor, if further information is required.

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