SAFETY DATA SHEET
FirstRESPONSE CARBON DIOXIDE FIRE EXTINGUISHER

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name

Carbon Dioxide

Product Use

The intended or recommended use of this preparation is as a Fire Extinguishing agent.

Manufacturer / Supplier

Fire & Safety WA
96 Furniss Road, Landsdale, WA, 6065
PH +618 9302 3210
Emergency Ph +61 428 832 236

2. HAZARDS INDENTIFICATIONS

Hazard classification

Not classified as hazardous according to NOHSC criteria. Classified as a dangerous good by the criteria of the ADG code.

3. CONFIRMATION / INFORMATION ON INGREDIENTS

Substance / Preparation	Substance
Substance Name	Carbon Dioxide
Contents	100%
CAS No	124-36-9
EC No	204-696-9

Contains no other components or impurities which will influence the classification of the product.

4. FIRST AID MEASURES

Inhalation

In high concentrations may cause asphyxiation. Symptoms may include loss of mobility/ consciousness. Victim may not be aware of asphyxiation. Low concentrations of CO2 cause increased respiration and headache. Remove victim to uncontaminated area wearing self contained breathing apparatus. Keep victim warm and rested. Call a doctor. Apply artificial respiration if breathing stopped.

Skin/Eye Contact

Immediately flush eyes thoroughly with water for at least 15 minutes. In case of frostbite spray with water for at least 15 minutes. Apply a sterile dressing. Obtain medical assistance.

Ingestion

Not expected to present a significant ingestion hazard under anticipated conditions of normal use.

5. FIRE FIGHTING MEASURES

Flammable Class

Non Flammable.

Specific Hazards

Exposure to fire may cause containers to rupture/ explode.

Hazardous Combustion Products

None.

Extinguishing Media

This preparation is an extinguishing media. Use media appropriate for surrounding materials.

Specific Methods

If possible, stop flow of product. Move away from the container and cool with water from a protected position. If leaking do not spray onto container. Water surrounding area from protected position to contain fire.

Special Protective Equipment for Firefighters

In confined space use self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions

Evacuate area. Use protective clothing. Wear self-contained breathing apparatus when entering area unless atmosphere is proved to be safe. Ensure adequate air ventilation.

Environmental Precautions

Try to stop release. Prevent from entering sewers, basements and work pits, or any place where its accumulation can be dangerous.

Clean Up Methods

Ventilate area.

7. HANDLING AND STORAGE

General

Containers, which contain or have contained flammable or explosive substances, must not be inerted with liquid carbon dioxide.

Potential production of solid CO2 particles must be ruled out. In order to rule out potential electrostatic discharge production, the system must be adequately grounded.

Storage

Keep container below 50°C in a well-ventilated place.

Handling

Suck back of water into the container must be prevented. Do not allow backfeed 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.

The handling and storage information above applies to Carbon Dioxide stored in cylinders and not when contained in a stored-pressure fire extinguisher. When stored in a stored-pressure fire extinguisher ensure good housekeeping practices, store below 50°C and avoid dropping or severe impacts.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Personal Protection

Ensure adequate ventilation. Protect eyes, face and skin from liquid splashes.

Occupational Exposure Limits

Carbon Dioxide: ILV (EU) –8H – (mg.m3) : 9000
Carbon Dioxide: ILV (EU) – 8H (ppm) : 5000
Carbon Dioxide: TLV – TWA (ppm) : 5000
Carbon Dioxide: TLV – STEL (ppm) : 30000

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State at 200C

Liquefied Gas.

Colour

Colourless.

Odour

No odour warning properties.

Molecular Weight

44.

Melting Point (C)

56.6.

Boiling Point (C)

-78.5.

Critical Temperature

30.

Vapour Pressure

57.3 bar.

Relative Density, Gas (air=1)

1.52.

Relative Density, Liquid (water = 1)

1.03.

Solubility in Water (mg/l)

2000.

Flammability Range (vol% in air)

Non flammable.

Gas/vapour heavier than air. May accumulate in confined spaces, particularly at or below ground level.

10. STABILITY AND REACTIVITY

Stability and Reactivity

Stable under normal conditions. Liquid spillages can cause embrittlement of structural materials.

12. ECOLOGICAL INFORMATION

Toxicity Information

In high concentrations cause rapid circulatory insufficiency. Symptoms are headache, nausea and vomiting, which may lead to unconsciousness.

Ecological Effects Information

When discharged in large quantities may contribute to the greenhouse effect. Can cause frost damage to vegetation.

Global warming potential (CO2=1) 1

13. DISPOSAL CONSIDERATIONS

Do not discharge into any place where its accumulation could be dangerous. Discharge to atmosphere in large quantities should be avoided. Contact supplier if guidance is required.

14. TRANSPORT INFORMATION

UN Number	1044
ADG Class	2.2
Packing Group	Not applicable
Proper Shipping Name	FIRE EXTINGUISHERS with compressed or liquified gas

HAZCHEM

Emergency Action Code 2TE

Avoid Transport on vehicles where the load space is not separated from the driver's compartment. Ensure vehicle driver is aware of the potential hazards of the load and knows what to do in the event of an accident or an emergency.

15. REGULATORY INFORMATION

EC Classification

Not included in Annex I.

Not classified as dangerous

EC Labelling No	EC labelling required
Symbol(s)	None
R Phrase(s)	None
S Phrase(s):	None

11. OTHER INFORMATION

Asphyxiant in high concentrations

May cause frostbite

Keep container in a well-ventilated place

Do not breathe the gas

Ensure all national/local regulations are observed

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

DISCLAIMER OF LIABILITY

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