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:

Antec Group Pty Ltd

9 Chicago Avenue, NSW 2148

Ph: +61 2 9622 9622

Emergency Ph: 13 11 26

2. HAZARDS IDENTIFICATIONS

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

Hazards identification:

Liquefied gas. Contact with liquid may cause coldburns / frostbite.

3. COMPOSITION/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. Ob-tain 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 Fire fighters:

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.

NOTE: 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 (s)
Critical temperature:	30 57.3
Vapour pressure:	bar 1.52

Relative density, gas (air=1):

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.

11. ECOLOGICAL INFORMATION:

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

12. ECOLOGICAL INFORMATION:

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

General:

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 drivers 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.

Before transporting product containers:

- Ensure there is adequate ventilation
- Ensure that containers are firmly secured
- Compliance with applicable regulations

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

16. 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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