The attached Material Safety Data Sheet

relates to FireBox branded fire extinguishers

It was downloaded from

FireExtinguisherSales.com.au

Order online at **FireExtinguisherSales.com.au**

or phone 02 6550 1066

Safety Data Sheet

Carbon Dioxide (refrigerated)

Dated: 8 November 2016

1. PRODUCT IDENTIFICATION

1.1 Identification of the preparation

GHS Product Name: Carbon Dioxide (refrigerated)

Identifier Company Name: FIREBOX Australia PTY LTD

Address: Lot 5/19 Balook Drive, Berefield NSW, 2322

Telephone/Fax Number: Tel : +61 (02) 49664465 Fax: +61(02) 49664463

Recommended use of the chemical and restriction on use: CO2 Fire Extinguisher

2. HAZARDS IDENTIFICATION

2.1 GHS Classification of the substance/mixture

Classified as Hazardous according to the Globally Harmonised System of Classification and labelling of Chemicals (GHS) including Work, Health and Safety regulations, Australia.

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

2.2 Signal Word(s)

Warning

2.3 Hazard Statement(s)

H280 Contains gas under pressure; may explode if heated.

2.4 Pictogram(s)

Gases under pressure

2.5 Precautionary statement – Storage

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

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Preparation: Substance.

Substance name	Contents	CAS No	EC No
Carbon dioxide (refrigerated)	100	124-38-9	204-696-9

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

4. FIRST AID MEASURES

4.1. 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.

4. FIRST AID MEASURES (CONTINUED)

Remove victim to uncontaminated area wearing self-contained breathing apparatus.
Keep victim warm and rested. Call a doctor. Apply artificial respiration if breathing stopped.

4.2. Skin/eye contact: Immediately flush eyes thoroughly with water for at least 15 mins.
In case of frostbite, spray with water for at least 15 mins. Apply a sterile dressing.
Obtain medical assistance.

4.3. Ingestion: Ingestion is not considered a potential route of exposure.

5. FIRE-FIGHTING MEASURES

5.1. Flammable class: Non-flammable.
5.2. Specific hazards: Exposure to fire may cause containers to rupture/explode.
5.3. Hazardous combustion products: None.
5.4. Extinguishing media: All known extinguishers can be used.
5.5. 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 water onto container.
Water surrounding area (from protected position) to contain fire.

5.6. Special protective equipment for fire fighters: In confined space use self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

6.1. 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.

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

6.3. Clean-up methods: Ventilate area.

7. HANDLING AND STORAGE

7.1. 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.

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

7.3. Handling: 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.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Personal protection: Ensure adequate ventilation.
Protect eyes, face and skin from liquid splashes.

8.2. Occupational Exposure Limits:
Carbon dioxide (refrigerated): ILV (EU) - 8 H - [mg/m³]: 9000
Carbon dioxide (refrigerated) : ILV (EU) - 8 H - [ppm] : 5000
Carbon dioxide (refrigerated) : TLV© -TWA [ppm] : 5000
Carbon dioxide (refrigerated) : TLV© -STEL [ppm] : 30000

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state at 20 °C: 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 [°C]: 30
Vapour pressure [20°C]: 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.
Other data: 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. TOXICOLOGICAL INFORMATION

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

12. ECOLOGICAL INFORMATION

12.1. Ecological effects information: When discharged in large quantities may contribute to the greenhouse effect.
Can cause frost damage to vegetation.
12.2. 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: UN1044
Proper shipping name: Fire extinguishers with compressed or liquefied gas
Hazard Class or Division: Not a hazardous substance.
Road and Rail Transport (ADG Code):
This material is classified as Dangerous Goods Division 2.2 – Non-flammable non-toxic Gases according to the Australian Code for the Transport of Dangerous Goods by Road and Rail. (7^{th} Edition)
Division 2.2 Dangerous Goods are incompatible in a placard load with any of the following:

- Class 1, Explosives

Division 2.1 Flammable Gases when the Division 2.2 gas has a subsidiary risk 5.1 except when all are packed in cylinders or pressure drums not exceeding 500L capacity.

- Division 4.2, Spontaneously Combustible Substances
- Division 5.2, Organic Peroxides

Marine Transport (IMO/IMDG):
Classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) fore transport by sea.
Division: 2.2
EMS- F-C, S-V

UN-No: 1044
Special Provisions: 225
Proper shipping Name: Fire extinguishers with compressed or liquefied gas

Air Transport (ICAO/IATA):
Classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air.
Packing Instructions (cargo only): 213
Packing Instructions (passenger & cargo): Forbidden
Special Provision: A19
UN-No: 1044
Proper shipping Name: Fire extinguishers with compressed or liquefied gas

IMDG Marine pollutant: No

For additional transport information, contact Ansul Incorporated.
No harm to the environment is expected from this preparation.

15. REGULATORY INFORMATION

EC Classification: Not included in Annex I.
Not classified as dangerous preparation/substance.
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.
This Safety Data Sheet has been established in accordance with the applicable Australian Standards and applies to all countries that have translated the Standards in their national laws.

DISCLAIMER OF LIABILITY: Before using this product in any new process or experiment, a thorough material compatibility and safety study should be carried out. Details given in this document are believed to be correct at the time of going to press. Whilst proper care has been taken in the preparation of this document, no liability for injury or damage resulting from its use can be accepted.

End of document