



Company:	M P S M & Bull Partnership - HR2 6JF
Substance(s) being Assessed:	Carbon Dioxide Extinguisher (CF)
Where is substance used?:	Warehouse/Vehicles/Customer Sites
COSHH Reference Number:	Carbon Dioxide (CF)
Safety Data Sheet Ref. No.:	H & S Info Sheet CO2
Emergency Contact Number:	01432 373161
Date of Assessment:	07/11/2011

Carbon Dioxide Extinguisher (CF)

What is the substance used for?

Fire fighting equipment to be used on Class E fires (Energised Electrical Equipment), limited use on Class A (Wood, Paper, Plastic) and Class B (Flammable & Combustible Liquids) fires.

CHEMICAL PRODUCT/COMPANY IDENTIFICATION

IDENTIFICATION: Carbon Dioxide Liquid (CO₂). Liquid maintained under Pressure.

COMPANY NAME: Bull Products

PRODUCT APPLICATION: Fire Extinguishing Medium (Liquid/gas)

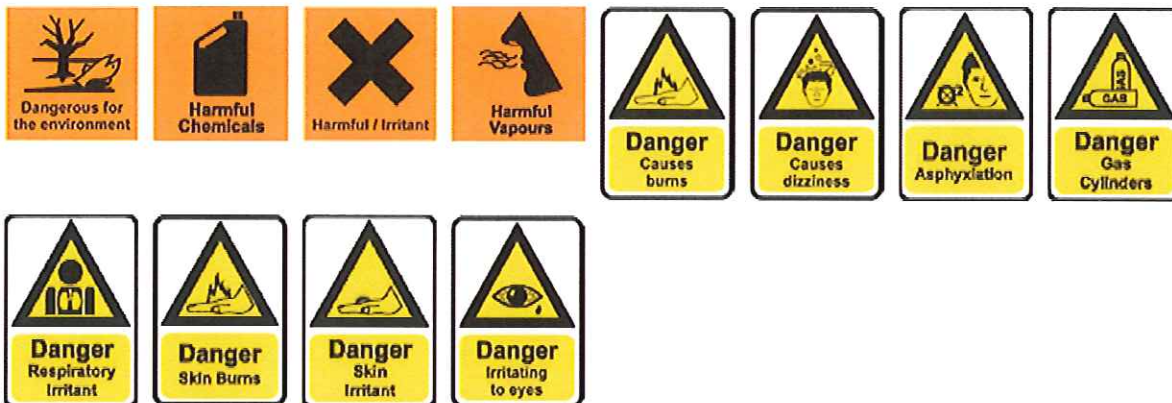
COMPOSITION/INFORMATION ON INGREDIENTS

CAS Number EINECS Number Product Type

00124-38-9 2046969 Substance

There are no components within the substance that would influence the classification.

Substance Hazards:



HAZARDS IDENTIFICATION

Inhalation: High concentrations cause asphyxiation.

Skin: Frostbite and burns from frostbite may occur on contact.

Eyes: Could cause damage to eyes on contact.

PHYSICAL AND CHEMICAL PROPERTIES

i. Appearance: Odourless liquid or gas. Cold liquid/gas produces a white fog. ii. Odour: None. iii. Symbol: CO₂. iv. Oxidising Properties: None. v. Boiling Point: -75°C at normal atmospheric pressure. vi. Relative Density: Slightly heavier than air. vii. Flammability: None. viii. Volume Expansion Ratio (liquid – gas): 535 at 15°C. ix. Solubility in Water: Slight. x. Formula Mass: 40gmol⁻¹.

STABILITY AND REACTIVITY

i. Stability: Stable in normal use. ii. Materials / Conditions to avoid: Rubber & PTFE. Will embrittle materials not designed or intended to be used at low temperatures.

TOXICOLOGICAL INFORMATION

Increased respiration at low concentrations.

Symptoms: Headache, nausea and vomiting leading to unconsciousness.

ECOLOGICAL INFORMATION:

Cryogenic liquid escape can cause localised frost. Large discharges will contribute to the greenhouse effect.

Workplace Exposure Limit:

See Exposure Controls

Routes of Exposure:



Exposure Limits: Long Term - 5000ppm. Short Term - 15000ppm.

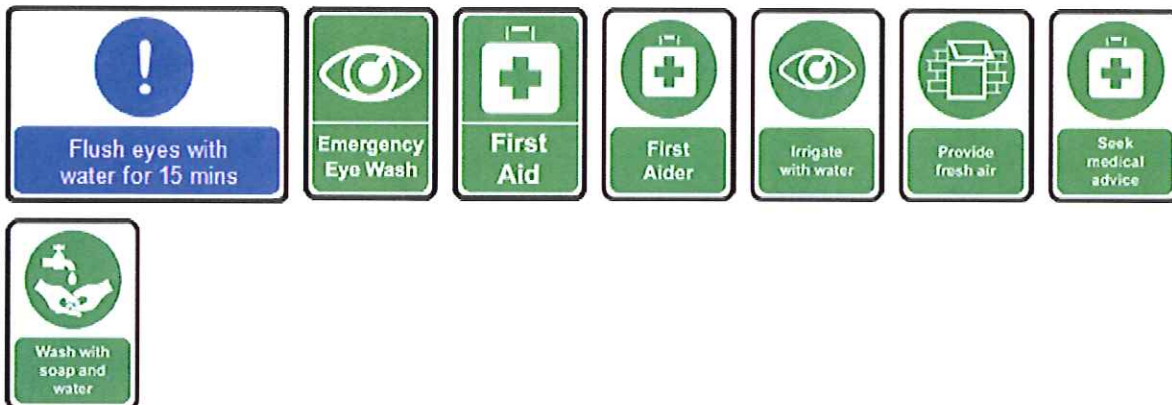
Who might be harmed?

All Staff

Control Measures:



First aid and Fire:



FIRST AID MEASURES

Contact with Skin: Flush the area with water for a minimum of 15 minutes. Medical attention is advised.

Contact with Eyes: Flush the eyes with water for a minimum of 15 minutes. Medical attention is advised.

Inhalation: This product can cause asphyxiation. Symptoms include loss of mobility and consciousness. Remove casualty from exposure and call for professional medical help. Use breathing apparatus. If breathing has stopped begin artificial respiration. Keep casualty warm.

FIRE FIGHTING MEASURES

There is no fire risk with carbon dioxide but emergency services must be made aware of the presence of cryogenic gas cylinders as they could detonate if heated causing danger & destruction. Spray cylinders with water from a protected position and maintaining a safe distance to keep the cylinder and contents cool. Protective Equipment: Self-contained breathing apparatus must be used at all times when in confined spaces.

Storage, Disposal & Spillage:



ACCIDENTIAL RELEASE ACTIONS

- i. Environmental Precautions - If it is safe close the cylinder valve and transport to the open air. Accumulations of invisible CO₂ gas in low lying areas such as pits, basements or sewers can be dangerous and these areas should not be entered without suitable breathing equipment until pronounced safe to do so.
- ii. Personal Precautions - If required wear self-contained breathing apparatus and suitable warm protective clothing. Evacuate area at all times.

STORAGE & HANDLING

Storage: Store cylinders away from heat sources and preferably in a well ventilated area. Larger cylinders should be kept out of doors, away from direct sunlight and in a well ventilated, safe compound. Identification labels and marks should always be clear and legible. Store in an upright position.

Handling: Cylinders must only be handled by trained personnel. Do not lift or move the cylinder using the valve. Do not use force to open or close the valve. Cylinders must always be suitable for the gas(es) and must have the correct test and working pressure. Cylinders must be regularly inspected.

DISPOSAL CONSIDERATIONS:

Avoid discharging large quantities into the atmosphere or where there is a danger of accumulations.

TRANSPORT INFORMATION:

Drivers of vehicles transporting this gas must carry a copy of these information sheets. Cylinders and vessels must be securely fastened and in an upright position. In the event of an accident the emergency services must be informed of the presence of the cylinders / vessels and the necessary precautions taken. Additional regulations apply for vehicles carrying large quantities of CO₂. All valve fittings and regulators to be removed or disconnected when in transit.

- i. UN Number: 2187. ii. ADR/RID No: 2.7a. iii. Class: 2.2. iv. ADR/RID Hazard No: v. Labelling ADR: Label 2: Non-flammable non-toxic gas.

Personal Protective Equipment:



P.P.E. Requirements:

i. Hand protection: Use suitable insulated gloves. ii. Eye Protection: Wear goggles to protect from ice particles. iii. Skin Protection: Wear suitable protective clothing and avoid contact with the skin at all times. iv. Respiratory Protection: Use breathing apparatus when there is any risk of exceeding the exposure limits.

The calculated risk factor for this task/operation is **12** (Probability: 3 x Severity: 4)

This is classed as a **MEDIUM** risk

Additional Measures:

None Required

Operating Procedures:

OTHER INFORMATION

- i. Employers Responsibilities: It is the duty of employers to tell employees and others who may be affected of the hazards outlined in this sheet and the need to take precautions and adopt safety measures in a responsible manner.
- ii. Data Information: The data and advice outlined in these sheets apply to the product when sold for the application detailed in paragraph 1. Other risks may apply when the product is used for other purposes. Do not use the product for other purposes without applying for written advice beforehand.
- iii. Information Circulation: It is your duty to ensure that anyone handling the product is provided with the information contained in these sheets.

Review Date: 07/11/2012

Name of Assessor: Ann-Marie Bishop

Position: HR, Quality, H & S Manager

Signature/s: 

Date: 11/11/2011