

1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY.

Product Identification

CARBON DIOXIDE FIRE EXTINGUISHER
UN No 1044
CAS 00124-38-9
EEC 2046969

Use

Fire Kwencher & own brand Carbon Dioxide fire extinguisher.

Producer

Soda-Club Ltd.
Airport-City, P.O.B 280
Ben-Gurion Airport , 70100
Israel.
Tel. ++ 972-3-9762323
Fax. ++ 972-3-9736673

Distribution in UK

Soda-Club Worldwide Trading Company
Unit 3, The Manorgrove Centre
Vicarage Farm Road
Peterborough
PE1 5UH
UK
Tel. ++44-(0)1733-296943
Fax. ++44-(0)1733-296941

Emergency Information

Mr. Graham Brooks
Tel. ++44-(0)1733-296947
Mobile ++44-(0)7717-340107

2 COMPOSITION OF THE INGREDIENTS

Description

Pressurised CO₂ gas Cylinder.

Hazardous ingredients

Liquefied CO₂
UN No 1044
CAS 00124-38-9

3 HAZARDS IDENTIFICATION

Pressurised gas cylinder.

Liquefied gas. Contact with product may cause burns or frostbite.

In high concentrations may cause asphyxiation.

Large volume increase on phase change.

4 FIRST AID MEASURES

General remarks: All information regarding First Aid refers to an accident, during which large amounts of carbon dioxide escape from the pressurised gas cylinders.

In case of inhalation: Remove the person in question from the danger zone and take him to an area with fresh air. Ensure use of protection measures for rescue personnel. Carbon dioxide has a suffocating effect. Resuscitate persons with respiratory arrest. Call emergency doctor immediately.

In case of skin contact: Skin contact with carbon dioxide snow can cause serious frostbite. Thaw affected spot with cold water and apply sterile bandage to it. Go to see a doctor immediately.

In case of eye contact: Immediately flush eyes with cold water. Go to see a doctor immediately.

In case of ingestion: Not probable.

Remarks for the doctor: Possibly artificial respiration, at the most intubation and observation of blood gases or acid/base equilibrium required, possibly THAM. Continuously symptomatic. Follow-up observation. In case of local effects of carbon dioxide snow, dry treatment as in the case of frostbite.

5 FIRE FIGHTING MEASURES

Suitable extinguishing media: product is non-flammable.

Extinguishing media that must not be used: all can be used.

Special exposure hazards: stored under pressure. When overheated, safety devices on CO₂ extinguishers can release all of the CO₂.

Special protective equipment for fire fighters: use self-contained breathing apparatus.

6 ACCIDENTAL RELEASE MEASURES

Precautions against personal injuries: As the extinguisher empties quickly, it can cool down to very low temperatures. Wait several minutes before touching the cylinder and other frozen items because of the danger of frostbite. Use a breathing mask with filter type B. In case of low oxygen concentration wear breathing aids that are independent of the surrounding air.

Measures for environmental protection: This product does not pose an environmental threat.

Means for cleaning / wiping: Provide good ventilation.

Additional remarks: In case of gas leakage provide good ventilation. (Danger of suffocation in closed spaces). Carbon dioxide is heavier than air and collects on the floor (especially dangerous for small children and pets).

7 HANDLING AND STORAGE

Gas cylinder is under pressure. Keep away from heat sources and handle carefully. Do not puncture the cylinder or tamper with the valve!

Handling

Take care with moving and stacking so there is no danger of a stack collapsing. The product is heavy.

Do not tamper with, or damage the extinguisher valve.

Storage

Store in a dry and cool, well ventilated location.

Do not overheat. Protect from direct sunlight and other heat sources. Safety device will release all of the cylinder contents when pressure is generated due to overheating.

8 Exposure controls/personal protection

in case of mass CO₂ spillage:

Exposure limits:

long term exposure limit (8 hour TWA): 5,000ppm (0.5% by volume)

short term exposure limit (10 minutes): 15,000 ppm (1.5% by volume)

Personal protective equipment

Ensure adequate ventilation

Respiratory protection: facemask with filter type B or breathing aids that are independent of the surrounding air.

Hand protection: gloves to protect from cold

Eye protection: goggles or face mask

Skin protection: overalls

Additional remarks: Carbon dioxide has a suffocating effect and is odourless.

9 Physical and chemical properties

All data refers to carbon dioxide.

Appearance: colourless gas, may appear as a white mist

Odour: slightly pungent

pH: N/A

Boiling point/boiling range: -56.6°C ~ 31°C depending on pressure

Melting point (dry ice to gas): sublimated at -78°C

Flash point: N/A

Flammability: non-flammable

Explosive properties: none

Oxidising properties: none

Vapour pressure: N/A

Relative density: 1.53 (air = 1).

Solubility: water solubility: 0.88 volumes at zero gauge pressure and 20°C

CO₂ gas is heavier than air & may accumulate in confined spaces eg cellars, store rooms.

10 Stability and Reactivity

Conditions to be avoided: heat, direct sunlight, blows, shock

Substances to be avoided: the product is inert.

Hazardous decomposition products: none

11 Toxicological Details

All data relates to carbon dioxide

Carbon dioxide is normally present in the air at approximately 300ppm (0.03%)

Recommended exposure limit for 8 hour time weighted average is 5,000ppm (0.5%)

At 20,000ppm (2%) ~ laboured breathing, headaches, exhaustion

At 50,000ppm (5%) ~ very laboured breathing (four times normal rate) signs of intoxication after 30 minutes

Up to 100,000ppm (10%) ~ very laboured breathing, headaches, visual disturbance, impaired judgement, rapid loss of consciousness

Above 10% ~ more rapid loss of consciousness, further prolonged exposure to high concentrations may eventually result in death from asphyxiation

12 Ecological Information

All data relates to carbon dioxide

Degradability: is converted to oxygen by plant life photosynthesis

Accumulation: is readily dispersed by ventilation

Ecotoxicity: generally not hazardous to water quality

Other adverse effects: is a contributor to the greenhouse effect

13 Disposal considerations

Extinguisher assemblies:

Return to manufacturer or distributor for disposal.

Vent gas to atmosphere in a well ventilated environment

14 Transport information

ADR/RID/GGVS/GGVE Class: 2 Number/Letter: 6A Labelling: Sample 2.2

Proper shipping name: **Fire Extinguishers**

Description for transport documents: **UN 1044 Fire Extinguishers, 2.2, 3(E)**

The transport category tunnel restriction code 3(E) is not needed if the route does not include any restricted tunnels.

15 Regulatory information

Design code BS 5045 Pt 8 for Aluminium Cylinders

EN 3-7:2004 for fire extinguisher assemblies

Approval #s COV0412447/01, COV0430123/05 & /06 for the Aluminium Cylinders.

Approval # KM96452 (BSI) and 713a/01 ~/08 (LPCB) & 713b/01 ~ /03 (LPCB)

CE Approval from Lloyds Register ~ CE0038 for extinguishers

To use the fire extinguisher:

- Use the extinguisher upright, break the security seal and remove the safety pin.
- Direct the horn at the base of the fire.
- Squeeze the handle to activate the extinguisher, release the handle to stop.

The double skin horn is safe to hold during use.

The extinguisher is ideally suited to flammable liquid fires and fires in live electrical equipment.

Further instruction is given in the Owners Manual. A manual is included with most extinguishers or a copy may be obtained free of charge from Soda-Club Worldwide Trading Company.

The information contained in this data sheet is based on our present level of knowledge. It does not present any assurance of product features, and does not represent any legal relationship.

The user is recommended to check for other local or national laws or requirements that may be applicable.

16 Other Information

It is recommended that a potential user should have some training in the correct use of a fire extinguisher. This is best done by contacting one of the many professional fire extinguisher supply and service companies.

- **A fire extinguisher is designed to fight a small fire that has just started.**
- If you cannot get within 2 metres (6 feet) of the fire it is already too big and should be left to the fire brigade.
- Never put yourself or others at risk.
- Ensure you have a clear escape path from a fire in case it gets out of control.

A CO₂ fire extinguisher should be used on fires involving flammable liquids and on fires involving live electrical equipment. **NOTE** ! These extinguishers should not be used for cooking oil / chip pan fires, where a fire blanket or damp cloth should be used to smother the flames and left to cool.

More information is given in the Users Manual or may be obtained by contacting a local fire extinguisher supply company.

Key CO₂ data for this MSDS is extracted from a CO₂ suppliers safety data book.