

## Safety Data Sheet - Carbon Dioxide (Solid)

### 1 IDENTIFICATION OF THE SUBSTANCE/ PREPARATION AND OF THE COMPANY

**Product name** Carbon Dioxide (Solid)

**Chemical formula** CO<sub>2</sub>

**Company** see footer

**identification**

**Emergency phone Nos** 0845 130 3280

### 2 COMPOSITION/INFORMATION ON INGREDIENTS

**Substance/** Substance

**Preparation**

**Components/** Contains no other components

**Impurities** or impurities which will influence the classification of the product.

**CAS Nr** 124-38-9

**EEC Nr** 2046969

**(from EINECS)**

### 3 HAZARDS IDENTIFICATION

**Hazards identification** Refrigerated solidified gas.

Contact with product may cause cold burns or frostbite. In high concentrations sublimed vapour may cause asphyxiation.

### 4 FIRST AID MEASURES

**Inhalation of** In high concentrations may cause sublimed vapour asphyxiation. Symptoms may include loss of

mobility/consciousness. Victim may not be aware of asphyxiation. Low concentrations of CO<sub>2</sub> 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 with** Immediately flush eyes thoroughly

**Carbon Dioxide** with water for at least 15 minutes.

**(Solid)** In case of frostbite spray with tepid water for at least 15 minutes. Apply a sterile dressing. Obtain medical assistance.

**Ingestion** Ingestion is not considered a potential route of exposure.

### 5 FIRE FIGHTING MEASURES

**Specific hazards** Non flammable

**Hazardous**

**combustion products** None

**Suitable extinguishing media**

All known extinguishants can be used.

**Specific methods** Water on Solid Carbon Dioxide increases sublimation. Higher risk of asphyxiation.

**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** Try to stop release.

**precautions** Prevent from entering sewers, basements and workpits, or any place where its accumulation can be dangerous.

**Clean up methods** Ventilate area.

### 7 HANDLING AND STORAGE

**Handling and storage** Use only properly specified equipment which is suitable for this product. Contact your supplier if in doubt. Refer to supplier's container handling instructions. Keep container in a well ventilated place.

### 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

**Exposure limit** UK: STEL; 15000ppm; LTEL: 5000ppm

**Personal protection** Ensure adequate ventilation. Protect eyes, face and skin from contact with product.

### 9 PHYSICAL AND CHEMICAL PROPERTIES

**Molecular weight** 44

**Melting point** -56.6°C

**Boiling point** -78.5°C (sublimes)

**Critical temperature** 30°C

**Relative density, gas** 1.52 (air=1)

**Relative density, liquid** 1.03 (water=1)

**Relative density, solid** 1.87 (water=1)

**Vapour Pressure 20°C** 57.3 bar

**Solubility mg/l water** 2000 mg/l

**Appearance/Colour** Translucent white solid

**Odour** No odour warning properties

**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 at atmospheric pressure and -78°C. At normal temperatures product sublimes into Carbon Dioxide gas. Contact with solid can cause embrittlement of structural materials.

### 11 TOXICOLOGICAL INFORMATION

**General** High concentrations of sublimed vapour cause rapid circulatory insufficiency. Symptoms are headache, nausea and vomiting, which may lead to unconsciousness.