



## 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** 08433 192919

### 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 sublimed vapour** In high concentrations may cause 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 Carbon Dioxide (Solid)** Immediately flush eyes thoroughly with water for at least 15 minutes. 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 precautions** Try to stop release. 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.