

**MATERIAL SAFETY DATA SHEET**  
**CALCIUM CARBIDE**

**Carbide Industries Limited**  
**Althorpe Wharf**  
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**DN17 3DA**

**1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND OF THE COMPANY / UNDERTAKING**

**Product name:** CALCIUM CARBIDE  
**CAS number:** 75-20-7  
**EINECS number:** 200-848-3  
**Index number:** 006-004-00-9

**2. COMPOSITION / INFORMATION ON INGREDIENTS**

**Ingredient:** CALCIUM CARBIDE

TYPICAL CHEMICAL ANALYSIS			
Main Components	(%)	Trace elements	(ppm)
CaC <sub>2</sub>	75 - 80	P	4
CaO	15 - 20	Pb	40
S	0.5	SiO <sub>2</sub>	1.70
C	0.8		

**3. HAZARDS IDENTIFICATION**

**Main hazards:** Contact with water liberates extremely flammable gases.  
**Other hazards:** Hygroscopic; readily absorbs water from air.

**4. FIRST AID MEASURES (SYMPTOMS)**

**Skin contact:** There may be irritation and redness at the site of contact.  
**Eye contact:** There may be irritation and redness.  
**Ingestion:** Headaches or general malaise may result. Nausea and stomach pain may occur. There may be vomiting.  
**Inhalation:** Exposure may cause coughing or wheezing. There may be a feeling of tightness in the chest with shortness of breath. There may be vomiting.

#### 4. FIRST AID MEASURES (ACTION)

- Skin contact:** Remove all contaminated clothes and footwear immediately unless stuck to skin. Drench the affected skin with running water for 10 minutes or longer if substance is still on skin. Transfer to hospital if there are any burns or symptoms of poisoning.
- Eye contact:** Bathe the eye with running water for 15 minutes. Transfer to hospital for specialist examination.
- Ingestion:** Do not induce vomiting. If conscious, give 1 pint of water to drink immediately. If unconscious, check for breathing and apply artificial respiration if necessary. If unconscious and breathing is OK, place in the recovery position. Transfer to hospital as soon as possible.
- Inhalation:** Remove casualty from exposure ensuring one's own safety whilst doing so. If unconscious, check for breathing and apply artificial respiration if necessary. If unconscious and breathing is OK, place in the recovery position. If conscious, ensure the casualty sits or lies down. If breathing becomes bubbly, have the casualty sit and provide oxygen if available. Transfer to hospital as soon as possible.

#### 5. FIRE-FIGHTING MEASURES

- Extinguishing media:** Class D extinguisher. Do not use water.
- Exposure hazards:** Highly flammable. In combustion emits toxic fumes of carbon dioxide and carbon monoxide
- Protection of fire-fighters:** Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes.

#### 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions:** Refer to section 8 of SDS for personal protection details. Eliminate all sources of ignition. Do not create dust.
- Environmental precautions:** Do not discharge into drains or rivers. Contain the spillage using bunding.
- Clean-up procedures:** Mix with sand or vermiculite. Transfer to a closable, labelled salvage container for disposal by an appropriate method. Wash the spillage site with large amounts of water. Do not use equipment in clean-up procedure which may produce sparks.

#### 7. HANDLING AND STORAGE

- Handling requirements:** Ensure there is sufficient ventilation of the area. Avoid the formation or spread of dust in the air. Avoid direct contact with the substance. Smoking is forbidden. Use non-sparking tools. Prevent contact with water.
- Storage conditions:** Store in cool, well ventilated area. Keep away from sources of ignition. Keep container tightly closed. Avoid contact with water or humidity.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Engineering measures:** Ensure there is sufficient ventilation of the area. Use only in a chemical fume hood.

**Respiratory protection:** Self-contained breathing apparatus must be available in case of emergency.

**Hand protection:** Protective gloves.

**Eye protection:** Safety goggles. Ensure eye bath is to hand.

**Skin protection:** Boots made of PVC. Ensure safety shower is to hand.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**State:** Powder

**Colour:** Dark grey

**Oxidising:** Non-oxidising (by EC criteria)

**Solubility in water:** Reacts with water

### PHYSICAL PROPERTIES

**Density** Approx. 2.2 gr/cm<sup>3</sup>

**Bulk weight** 1.0 – 1.2 gr/cm<sup>3</sup>

**Melting point** > 1800 °C

## 10. STABILITY AND REACTIVITY

**Conditions to avoid:** Moist air. Humidity. Sources of ignition.

**Materials to avoid:** Water. Acids. Strong oxidising agents. Alcohols.

**Hazardous Decomposition Products:** In combustion emits toxic fumes or carbon dioxide and carbon monoxide.

## 11. TOXOLOGY INFORMATION

## 12. ECOLOGICAL INFORMATION

## 13. DISPOSAL CONSIDERATIONS

**Waste disposal:** Arrange for collection by specialised disposal company.

**Disposal of packaging:** Arrange for collection by specialised disposal company.

**NB:** The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

#### 14. TRANSPORT INFORMATION

**UN no:** 1402  
**Shipping name:** CALCIUM CARBIDE  
**Class:** 4.3  
**Packing group:** II  
**ADR Hin Code (bulk tanks only):**423

#### 15. REGULATORY INFORMATION

**Hazard symbols:** Highly flammable  
**Risk phrases:** R15: Contact with water liberates extremely flammable gases.  
**Safety phrases:** S2: Keep out of the reach of children.  
S8: Keep container dry.  
S43: In case of fire, use

**Note:** The regulatory information given above only indicates the principal regulations specifically applicable to the product described in the safety data sheet. The user's attention is drawn to the possible existence of additional provisions which complete these regulations. Refer to all applicable national, international and local regulations or provisions.

#### 16. ADDITIONAL INFORMATION

**Legal disclaimer:** The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.