

# Camlab Limited – Material Safety Data Sheet


## 1. Identification

Product Code CC/0140-CO

Product Name **CALCIUM CARBIDE tech.**

Molecular Formula **CaC<sub>2</sub> =64.10**

CAS Number **75-20-7**

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## 2. Composition

Component	CAS No	EEC No	Conc w/w	Classification & Risk Phrases	Exp (See 8.1)
Calcium carbide	75-20-7	200-848-3	> 80.0%	F : R15	N/A
Calcium oxide	1305-78-8	215-138-9	13.0%	F : R41	WEL
Silicon dioxide	7631-86-9	231-545-4	2.0%	F :	N/A

## 3. Hazards Identification



Contact with water liberates highly flammable gases.

## 4. First Aid Measures

Eyes Irrigate thoroughly with plenty of water for at least 10 minutes, holding the eye open. OBTAIN MEDICAL ATTENTION URGENTLY.

Skin Wash off skin thoroughly with water. Remove contaminated clothing immediately and wash before re-use. OBTAIN MEDICAL ATTENTION.

Inhalation Remove from exposure. Keep warm and at rest. If conscious place in a sitting position. If there is difficulty in breathing give oxygen if available. If breathing stops or shows signs of failing, apply artificial resuscitation. OBTAIN MEDICAL ATTENTION.

Ingestion If conscious give plenty of water to drink. Do not induce vomiting. OBTAIN MEDICAL ATTENTION URGENTLY.

## 5. Fire Fighting Measures

Hazards Evacuate area immediately. Keep up wind. Avoid exposure to toxic vapours and fumes. Fire-fighters should wear protective clothing and breathing apparatus. May evolve toxic fumes if involved in a fire.

Extinguishing Media Dry chemical powder.

Unsuitable Media Do not allow water to come into direct contact with material.

## 6. Accidental Release Measures

Personal Protection	Use approved personal protective equipment. Ensure no contact with water, acids or other aqueous solutions is possible. Evacuate area immediately. Do not allow other people to enter area.
Environmental	Keep material out of sewers, storm drains, surface waters and soil. Notify the Environmental Agency and local Environmental Health Officer if major spillage occurs.
Major Spillage	Shovel/sweep up into container for removal
Minor Spillage	Shovel/sweep up into container for removal

## 7. Storage & Handling

Handling Precautions	Avoid contact with water, acids or other aqueous solutions.  No specific precautions.
Storage Conditions	Store in a dry place protected against moisture and water. Keep well protected from ingress of water and well separated from acids

## 8.1 Workplace Exposure Limits

Component	CAS No	Workplace Exposure Limits				Maximum Exposure Limits			
		Long Term		Short Term		Long Term		Short Term	
		ppm	mg m <sup>-3</sup>	ppm	mg m <sup>-3</sup>	ppm	mg m <sup>-3</sup>	ppm	mg m <sup>-3</sup>
Calcium carbide	75-20-7	No prescribed exposure limits available							
Calcium oxide	1305-78-8	-	2.000	-	-	-	-	-	-
Silicon dioxide	7631-86-9	No prescribed exposure limits available							

## 8.2 Personal Protection

Respiratory	Presents no significant inhalation health hazard.
Hands	Wear gloves.
Eyes	Use chemical splash proof glasses or goggles.
Skin	Avoid contact with skin.

## 9. Physical & Chemical Properties

Appearance	Sharp irregular, light grey to near black, rock-like solid.
Odour	Characteristic-garlic type odour.
pH	Not available
Boiling point	Not available
Melting point	2300.0 °C
Flash point	Not available
Upper Flammable Limit	Not available
Lower Flammable Limit	Not available
Auto Ignition	Not available
Explosive properties	No.
Oxidising Properties	No.
Vapour Pressure	Negligible
Relative Density	2.2200 °C
Water Solubility	Reacts violently with water evolving a flammable gas which may explode or catch fire.

## 10. Stability & Reactivity

Chemical Stability	Stable under normal conditions but decomposes violently in contact with water.
Conditions to Avoid	Avoid contact with water or water vapour.
Materials to Avoid	Contact with water or aqueous solutions evolves highly flammable acetylene gas.
Hazardous Decomposition Products	Decomposes to form flammable acetylene and very toxic and highly flammable phosphine gas.

## 11. Toxicological Information

Eyes	Can cause severe burns or blindness on contact with the eyes and fumes from burning material are highly irritating.
Skin	Direct contact with moisture on the skin causes severe thermal and caustic burns.
LD50 Skin	Not available
Ingest	Ingestion will cause severe mouth burns, and if swallowed extensive damage to the oesophagus.
LD50 Ingest	Not available
Inhalation	Fumes from burning material are highly irritating to the upper respiratory tract.
Carcinogenicity	No information is available.
Mutagenicity	No information is available.
Reproductive Effects	No information is available.

## 12. Ecological

Small amounts present no specific environmental hazard.

## 13. Disposal Considerations

Disposal Methods	Small amounts may be carefully decomposed in a large excess of water.
Contaminated Packaging	Very carefully wash out containers with water. Use a licensed waste disposer.

## 14. Transport Information

Proper Shipping Name	Calcium carbide
UN Number	1402
UN Classification	4.3 Dangerous when wet
Subsidiary Risk	None
Flash Point	Not available
Packing Group	II
Transport Category	2
Marine pollutant	No
ADR Hazard ID	423



## 15. Regulatory Information

Labelling	Highly Flammable.
Classification	

Label Symbols

F



Risk & safety Phrases Contact with water liberates highly flammable gases. Keep out of reach of children. Keep container dry. In case of fire use dry powder extinguisher - Never use water.

EEC Number 200-848-3

## 16. Other Information

Document Information This document has been prepared in accordance with directive 88/379/EEC.

The information contained in this document only covers the hazards presented by this material, it DOES NOT constitute a workplace risk assessment.

## 16. Other Information (continued)

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