



馬 電 石 有 限 公 司

MAGNALIUM SDN. BHD. (229609-U)

Safety Data Sheet (SDS) Calcium Carbide

Section 1: Identification of the hazardous chemical and of the supplier

- 1.1 Product Identifier** : Calcium Carbide
1.2 Other means of identification : Carbide
1.3 Recommended use of the chemical : Generation of dissolved acetylene gas
1.4 Details of principal supplier :
Company Name: Magnalium Sdn Bhd
Address : Lot Pt No. 14788, 2.5km off Jalan Pengkalan,
31300 Simpang Pulai, Perak, Malaysia.
Phone Number : +605 357 5866/+605 357 6023
Fax Number : +605 357 2566
Webpage : <http://www.magnalium.com.my>
Email : enquiry@magnalium.com.my
- 1.5 Emergency phone number** : +6016-222 4925

Section 2: Hazard Identification

2.1 Classification of the hazardous chemical

Chemicals which, if in contact with water, emit flammable gases – Category 1 (ICOP 2014)
Skin corrosion or irritation – Category 2 (ICOP 2014)
Serious eye damage or eye irritation – Category 2 (ICOP 2014)

2.2 Label elements

Hazard pictogram :



Signal word : Danger

Hazard statement : If in contact with water, releases flammable gases which may ignite spontaneously.
Causes skin irritation.
Causes serious eye irritation.

Precautionary statement : Prevention
Keep away from any possible contact with water, to prevent violent reaction

and possible flash fire.

Wash hand thoroughly after handling.

Response

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

IF IN EYES: Rinse continuously with water for several minutes.

Storage

Store in a dry place.

Disposal

Dispose of contents/containers in accordance with local regulations.

Section 3: Composition and information of the ingredients of the hazardous chemical

Hazardous Chemical: Calcium Carbide

TYPICAL CHEMICAL ANALYSIS (AVERAGE)			
Components	(%)	Components	(%)
CaC ₂	85.30	Fe ₂ O ₃ }	1.45
CaO	9.50	Al ₂ O ₃ }	
SiO ₂	2.10	MgO	0.35
		C	1.20

Section 4: First-aid measures

4.1 Description of first-aid measures, subdivided according to different routes of exposure as follow:

- Inhalation : Rest the patient in a well ventilated area and seek medical attention.
- Skin contact : Take off immediately all contaminated clothing. Rinse skin with water/shower. Seek medical attention.
- Eye contact : Rinse continuously with water for several minutes
- Ingestion : Do not induce vomiting. Loosen tight clothing. Maintain an open airway. Seek medical attention.

4.2 Most important symptoms and effects, both acute and delayed:

Causes skin irritation. Contact with moist skin & mucous membranes leads to ulceration & scarring.
Causes serious eye irritation. May cause redness, pain, blurred vision.

4.3 Indication of any immediate medical attention and special treatment needed, if necessary:

Notes to physician : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Specific treatment : No specific treatment.

Protection of first-aiders : No action shall be taken involving any personal risk or without having received suitable training. If it is suspected that fumes are still present, the rescuer should wear appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wear clothes or wash contaminated clothing thoroughly with water before removing it.

Section 5: Fire-fighting measures

5.1 Suitable extinguishing media:

Dry chemical powder or CO₂.

5.2 Physicochemical hazards arising from the chemical:

In contact with water releases flammable gases which may ignite spontaneously. Runoff to sewer may create fire or explosion hazard.

5.3 Special protective equipment and precautions for fire fighters:

Protective equipment: Wear protective eyewear, gloves and clothing.

Precautions : Avoid inhaling gases, fumes, dust, mist, vapor and aerosols. Avoid contact with skin, eyes and clothing.

Section 6: Accidental release measures

6.1 Personal precautions, protective equipment, and emergency procedures:

Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Keep away from water. Ensure adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

6.2 Environmental precautions:

Prevent spilled material from reaching drains, sewer, or waterway.

6.3 Methods and materials for containment and cleaning up

Small spill : Place spillage into a dry waste disposal container with appropriate tools and use personal protection equipments.

Large spill : Cover spillage with sand, dry earth or non-flammable materials. Remove spillage to dry disposal container. Keep away from all ignition sources.

Section 7: Handling and Storage

7.1 Precautions for safe handling

Keep away from heat and sources of ignition. Ground all equipment containing material. Keep away from acids and moisture. Do not eat, drink or smoke when handling this product.

7.2 Conditions for safe storage, including any incompatibilities

Store in a cool, dry and well ventilated place. Keep away from water or moist air. Keep container tightly sealed. Store away from incompatible materials.

Section 8: Exposure controls and personal protection

8.1 Control parameters:

No applicable occupational exposure limits.

8.2 Appropriate engineering controls:

See Section 7.1 Precautions for safe handling

8.3 Individual protection measures:

Wear long sleeves, safety goggles and gloves.

Section 9: Physical and chemical properties

Appearance:

Physical state	: Solid
Colour	: Gray
Odour	: Garlic-like
Odour threshold	: Not available
pH	: 12.48 at 20 g/l
Melting point	: 2,300°C (4,172°F)
Boiling point/boiling range	: Data is not available
Flash point	: Data is not available
Evaporation rate	: Data is not available
Flammability (solid, gas)	: Not applicable (the substance decomposes rapidly producing flammable gas on contact with water)
Explosive limits	: Non explosive (the substance decomposes rapidly producing flammable gas on contact with water)
Vapour pressure	: Data is not available
Vapour density	: Data is not available
Relative density	: 2.22 g/cm ³ at 25°C
Solubility	: Data is not available
Partition coefficient: n- Octanal/water	: Data is not available
Auto-ignition temperature	: Not applicable (the substance decomposes rapidly producing

	flammable gas on contact with water)
Decomposition Temperature	: Data is not available
Viscosity	: Data is not available

Section 10: Stability and reactivity

Reactivity	: Reacts exothermically with water to form highly flammable gas
Chemical stability	: Stable under normal temperatures and pressures
Possibility of hazardous reaction	: Hazardous reaction or instability may occur under certain condition of storage or use. Conditions may include the following: Contact with water Reactions may include the following: Spontaneous flammability Liberation of flammable gas
Condition to avoid	: Minimise exposure to air and moisture to avoid degradation. Avoid contact with water
Incompatible materials	: Oxydizing materials (e.g. bromine, chlorates), water.
Hazardous decomposition Products	: Acetylene and calcium hydroxide.

Section 11: Toxicological information

Acute Toxic	: Data is not available
Skin corrosion or irritation	: In contact with skin may cause dermatitis. Contact with moist skin and mucous membranes leads to ulceration and scarring.
Serious eye damage or eye irritation	: May cause redness, pain, blurred vision.
Respiratory sensitization	: Data is not available
Skin sensitization	: Data is not available
Germ cell mutagenicity	: Data is not available
Carcinogenicity	: Data is not available
Reproductive toxicity	: Data is not available
Specific target organ toxicity (STOT) – single exposure	: Data is not available
Specific target organ toxicity (STOT) – repeated exposure	: Data is not available
Aspiration hazard	: Data is not available

Section 12: Ecological information

Ecotoxicity	: Data is not available
Persistence and degradability	: Data is not available
Bioaccumulative potential	: Data is not available
Mobility in soil	: Data is not available

Other adverse effects : Data is not available

Section 13: Disposal Information

The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of local environmental protection and waste disposal legislation. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste packaging should be recycled. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Prevent spillage of materials into soil, waterways, drains and sewers.

Section 14: Transport information

UN Number : 1402
UN proper shipping name : Calcium Carbide
Transport hazard class : 4.3



Packing group : II
Environmental hazard : No
Transport in bulk : Data is not available

Section 15: Regulatory information

Regulation : Malaysia Occupational Safety and Health Act 1994
Occupational Safety and Health (Classification, Labelling and Safety Data Sheet of Hazardous Chemicals) Regulations 2013.
Industry Code of Practice on Chemicals Classification and Hazard Communication 2014 (ICOP 2014).

Section 16: Other information

This Safety Data Sheet was last updated on **May 2, 2017**.

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