

## Safety Data Sheet

Conforms to Regulation (EC) No. 1907/2006 (REACH), Article 31, Annex II, as amended by Commission Regulation (EU) 2020/878

### CALCIUM CARBIDE (VIALS)

Date of first edition: 9/4/2025

Safety Data Sheet dated 05/09/2025

version 2

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1. Product identifier

Identification of the substance:

Trade name: CALCIUM CARBIDE (VIALS)

Trade code: FO000740 02

CAS number: 75-20-7

EC number: 200-848-3

Index number: 006-004-00-9

### 1.2. Relevant identified uses of the substance or mixture and uses advised against

Recommended use: Other products for chemical or technical processes

Uses advised against: All uses other than recommended ones

### 1.3. Details of the supplier of the safety data sheet

Company: KERAKOLL S.p.A.

Via dell'Artigianato, 9

41049 Sassuolo (MODENA) - ITALY

Tel.+39 0536 816511 Fax. +39 0536816581

safety@kerakoll.com

### 1.4. Emergency telephone number

European emergency phone number 112

Ireland Emergency medical information: (seven days) contact National Poisons Information Centre, Beaumont Hospital, Dublin 9 DOV2NO, Ireland.

Members of the public Number (8 am-10 pm): +353 (0)1 809 2166

Healthcare professional telephone Number (24hrs): +353 (0)1 809 2566

Malta In case of emergency call: +356 2395 2000 (24h)

## SECTION 2: Hazards identification



### 2.1. Classification of the substance or mixture

#### Regulation (EC) n. 1272/2008 (CLP)

Water-react. 1 In contact with water releases flammable gases which may ignite spontaneously.

Skin Irrit. 2 Causes skin irritation.

Eye Dam. 1 Causes serious eye damage.

STOT SE 3 May cause respiratory irritation.

Adverse physicochemical, human health and environmental effects:

No other hazards

### 2.2. Label elements

#### Regulation (EC) No 1272/2008 (CLP):

#### Hazard pictograms and Signal Word



Danger

#### Hazard statements

H260 In contact with water releases flammable gases which may ignite spontaneously.

H315 Causes skin irritation.

H318 Causes serious eye damage.

H335 May cause respiratory irritation.

### Precautionary statements

P231+P232 Handle and store contents under inert gas. Protect from moisture.  
P261 Avoid breathing dust.  
P280 Wear protective gloves/clothing and eye/face protection.  
P302+P352 IF ON SKIN: Wash with plenty of water.  
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P312 Call a POISON CENTER if you feel unwell.  
P370+P378 In case of fire, use a dry powder fire extinguisher to extinguish.  
P402+P404 Store in a dry place. Store in a closed container.  
P501 Dispose of contents/container in accordance with applicable regulations.

### Contains

Calcium carbide

### Special provisions according to Annex XVII of REACH and subsequent amendments:

None.

### 2.3. Other hazards

This substance has no PBT, vPvB or endocrine disrupting properties

Other Hazards: No other hazards

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## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Substance Identifications:	Calcium carbide
CAS number:	75-20-7
EC number:	200-848-3
Index number:	006-004-00-9
Registration Number	01-2119494719-18

### 3.2. Mixtures

N.A.

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## SECTION 4: First aid measures

### 4.1. Description of first aid measures

In case of skin contact:

Immediately take off all contaminated clothing.  
OBTAIN IMMEDIATE MEDICAL ATTENTION.  
Remove contaminated clothing immediately and dispose off safely.  
After contact with skin, wash immediately with soap and plenty of water.

In case of eyes contact:

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.  
Protect uninjured eye.

In case of Ingestion:

Do not induce vomiting, get medical attention showing the SDS and label hazardous.

In case of Inhalation:

In case of inhalation, consult a doctor immediately and show him packing or label.

### 4.2. Most important symptoms and effects, both acute and delayed

Eye irritation  
Eye damages  
Skin Irritation  
Erythema

### 4.3. Indication of any immediate medical attention and special treatment needed

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

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## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

Suitable extinguishing media:

In case of fire, use a dry powder fire extinguisher to extinguish.  
Extinguishing media which must not be used for safety reasons:  
Water.

### **5.2. Special hazards arising from the substance or mixture**

Do not inhale explosion and combustion gases.  
Burning produces heavy smoke.

### **5.3. Advice for firefighters**

Use suitable breathing apparatus .  
Collect contaminated fire extinguishing water separately. This must not be discharged into drains.  
Move undamaged containers from immediate hazard area if it can be done safely.

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## **SECTION 6: Accidental release measures**

### **6.1. Personal precautions, protective equipment and emergency procedures**

#### **For non emergency personnel:**

Wear personal protection equipment.  
Wear breathing apparatus if exposed to vapours/dusts/aerosols.  
Provide adequate ventilation.  
Use appropriate respiratory protection.  
See protective measures under point 7 and 8.

#### **For emergency responders:**

Wear personal protection equipment.

### **6.2. Environmental precautions**

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.  
Retain contaminated washing water and dispose it.  
In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.  
Suitable material for taking up: absorbing material, organic, sand

### **6.3. Methods and material for containment and cleaning up**

Suitable material for taking up: absorbing material, organic, sand

### **6.4. Reference to other sections**

See also section 8 and 13

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## **SECTION 7: Handling and storage**

### **7.1. Precautions for safe handling**

Avoid contact with skin and eyes, inhalation of vapours and mists.  
Use localized ventilation system.  
Don't use empty container before they have been cleaned.  
Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.  
Contaminated clothing should be changed before entering eating areas.  
Do not eat or drink while working.  
See also section 8 for recommended protective equipment.

#### **Advice on general occupational hygiene:**

### **7.2. Conditions for safe storage, including any incompatibilities**

Always keep the containers tightly closed.  
Protect against moisture. Keep this product in a dry place.

Incompatible materials:

Keep away from water or from damp surroundings.

Instructions as regards storage premises:

Cool and adequately ventilated.

### **7.3. Specific end use(s)**

Recommendation(s)

None in particular

Industrial sector specific solutions:

None in particular

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## **SECTION 8: Exposure controls/personal protection**

### **8.1. Control parameters**

#### **Predicted No Effect Concentration (PNEC) values**

Exposure Route: Fresh Water; Exposure Frequency: Short Term (single use); PNEC Limit: 4.62 µg/l

Exposure Route: Marine water; Exposure Frequency: Short Term (single use); PNEC Limit: 0.462 µg/l

#### **Derived No Effect Level (DNEL) values**

Exposure Route: Human Inhalation; Exposure Frequency: Long Term, local effects  
Worker Industry: 2 mg/m<sup>3</sup>

Exposure Route: Human Inhalation; Exposure Frequency: Short Term, local effects  
Worker Industry: 4 mg/m<sup>3</sup>

## 8.2. Exposure controls

Eye protection:

Eye glasses with side protection.(EN166)

Protection for skin:

Chemical protection clothing. Safety shoes.

Protection for hands:

Protection for hands:

Suitable materials for safety gloves; EN 374:

Nitrile rubber - NBR: thickness  $\geq 0,35\text{mm}$ ; breakthrough time  $\geq 480\text{min}$ .

Respiratory protection:

Particle filter P2 .

Thermal Hazards:

N.A.

Environmental exposure controls:

N.A.

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## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state: Solid

Colour: Black

Odour: Characteristic

Odour threshold: N.A.

pH: N.A.

Kinematic viscosity: N.A.

Melting point/freezing point: 2300 °C (4172 °F)

Boiling point or initial boiling point and boiling range: N.A.

Flash point: Not Applicable

Lower and upper explosion limit: N.A.

Relative vapour density: N.A.

Vapour pressure: N.A.

Density and/or relative density: 2.22 g/cm<sup>3</sup>

Solubility in water: Reacts

Solubility in oil: N.A.

Partition coefficient n-octanol/water (log value): 0.37

Auto-ignition temperature: N.A.

Decomposition temperature: N.A.

Flammability: N.A.

Volatile Organic compounds - VOCs = 0 % ; 0 g/l

#### Particle characteristics:

Particle size: N.A.

### 9.2. Other information

No other relevant information

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## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Data not available.

### 10.2. Chemical stability

Data not available.

### 10.3. Possibility of hazardous reactions

None.

### 10.4. Conditions to avoid

Data not available.

### 10.5. Incompatible materials

Avoid all contact with water or with moist air.

Avoid contact with combustible materials. The product could catch fire.

### 10.6. Hazardous decomposition products

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## SECTION 11: Toxicological information

### 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

#### Toxicological Information of the Substance

a) acute toxicity	Not classified Based on available data, the classification criteria are not met LD50 Oral Rat > 2000 mg/kg LD50 Skin Rabbit > 2500 mg/kg
b) skin corrosion/irritation	The product is classified: Skin Irrit. 2(H315)
c) serious eye damage/irritation	The product is classified: Eye Dam. 1(H318)
d) respiratory or skin sensitisation	Not classified Based on available data, the classification criteria are not met
e) germ cell mutagenicity	Not classified Based on available data, the classification criteria are not met
f) carcinogenicity	Not classified Based on available data, the classification criteria are not met
g) reproductive toxicity	Not classified Based on available data, the classification criteria are not met
h) STOT-single exposure	The product is classified: STOT SE 3(H335)
i) STOT-repeated exposure	Not classified Based on available data, the classification criteria are not met
j) aspiration hazard	Not classified Based on available data, the classification criteria are not met

### 11.2. Information on other hazards

#### Endocrine disrupting properties:

This substance has no endocrine disrupting properties

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## SECTION 12: Ecological information

### 12.1. Toxicity

Adopt good working practices, so that the product is not released into the environment.

Eco-Toxicological Information:

#### List of Eco-Toxicological properties of the product

Not classified for environmental hazards.

Based on available data, the classification criteria are not met

- a) Aquatic acute toxicity : LC50 Fish > 50 mg/L 96h
- a) Aquatic acute toxicity : EC50 Daphnia = 4.62 mg/L 48h
- a) Aquatic acute toxicity : NOEC Fish = 50 mg/L 96h
- a) Aquatic acute toxicity : LOEC Daphnia = 3.33 mg/L 48h

### 12.2. Persistence and degradability

N.A.

### 12.3. Bioaccumulative potential

N.A.

### 12.4. Mobility in soil

N.A.

### 12.5. Results of PBT and vPvB assessment

This substance has no PBT or vPvB properties

### 12.6. Endocrine disrupting properties

This substance has no endocrine disrupting properties

### 12.7. Other adverse effects

N.A.

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## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Recover, if possible. Send to authorised disposal plants or for incineration under controlled conditions. In so doing, comply with the local and

national regulations currently in force. Disposal through discharge into wastewater is not permitted

The product disposed of as such, pursuant to Regulation (EU) 1357/2014, must be classified as hazardous waste

A waste code according to the European List of Wastes (LoW) cannot be specified, due to dependence on the usage. Contact an authorized waste disposal service.

**Properties of waste which render it hazardous (Annex III, Directive 2008/98/EC):**

N.A.

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**SECTION 14: Transport information**

**14.1. UN number or ID number**

1402

**14.2. UN proper shipping name**

ADR-Shipping Name: CALCIUM CARBIDE

IATA-Shipping Name: CALCIUM CARBIDE

IMDG-Shipping Name: CALCIUM CARBIDE

**14.3. Transport hazard class(es)**

ADR-Class: 4.3

IATA-Class: 4.3

IMDG-Class: 4.3

**14.4. Packing group**

ADR-Packing Group: I

IATA-Packing group: I

IMDG-Packing group: I

**14.5. Environmental hazards**

Marine pollutant: No

Environmental Pollutant: No

IMDG-EMS: F-G , S-N

**14.6. Special precautions for user**

Road and Rail (ADR-RID):

ADR-Label: 4.3

ADR - Hazard identification number: X423

ADR-Special Provisions: -

ADR-Transport category (Tunnel restriction code): 1 (B/E)

ADR Limited Quantities: 0

ADR Excepted Quantities: E0

Air (IATA):

IATA-Passenger Aircraft: Forbidden

IATA-Cargo Aircraft: 487

IATA-Label: 4.3

IATA-Subsidiary hazards: -

IATA-Erg: 4W

IATA-Special Provisions: -

Sea (IMDG):

IMDG-Stowage and handling: Category B H1

IMDG-Segregation: SG26 SG35

IMDG-Subsidiary hazards: -

IMDG-Special Provisions: -

**14.7. Maritime transport in bulk according to IMO instruments**

N.A.

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**SECTION 15: Regulatory information**

**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

Dir. 98/24/EC (Risks related to chemical agents at work)

Dir. 2000/39/EC (Occupational exposure limit values)

Regulation (EC) n. 1907/2006 (REACH)

Regulation (EC) n. 1272/2008 (CLP)

Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013

Regulation (EU) n. 286/2011 (ATP 2 CLP)

Regulation (EU) n. 618/2012 (ATP 3 CLP)

Regulation (EU) n. 487/2013 (ATP 4 CLP)

Regulation (EU) n. 944/2013 (ATP 5 CLP)

Regulation (EU) n. 605/2014 (ATP 6 CLP)

Regulation (EU) n. 2015/1221 (ATP 7 CLP)  
 Regulation (EU) n. 2016/918 (ATP 8 CLP)  
 Regulation (EU) n. 2016/1179 (ATP 9 CLP)  
 Regulation (EU) n. 2017/776 (ATP 10 CLP)  
 Regulation (EU) n. 2018/669 (ATP 11 CLP)  
 Regulation (EU) n. 2018/1480 (ATP 13 CLP)  
 Regulation (EU) n. 2019/521 (ATP 12 CLP)  
 Regulation (EU) n. 2020/217 (ATP 14 CLP)  
 Regulation (EU) n. 2020/1182 (ATP 15 CLP)  
 Regulation (EU) n. 2021/643 (ATP 16 CLP)  
 Regulation (EU) n. 2021/849 (ATP 17 CLP)  
 Regulation (EU) n. 2022/692 (ATP 18 CLP)  
 Regulation (EU) n. 2023/707  
 Regulation (EU) n. 2023/1434 (ATP 19 CLP)  
 Regulation (EU) n. 2023/1435 (ATP 20 CLP)  
 Regulation (EU) n. 2024/197 (ATP 21 CLP)  
 Regulation (EU) n. 2020/878  
 Regulation (EC) nr 648/2004 (Detergents).

Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications:

Restrictions related to the product: 40

Restrictions related to the substances contained: 75

Provisions related to directive EU 2012/18 (Seveso III):

**Seveso III category according to Annex 1, part 1**

Product belongs to category: O2    100    Upper-tier threshold (tonnes) 500

**Regulation (EU) No 649/2012 (PIC regulation)**

No substances listed

**German Water Hazard Class.**

3: Severe hazard to waters

**German Lagerklasse according to TRGS 510:**

LGK 4.3

SVHC Substances:

No SVHC substances present in concentration >= 0.1%

**15.2. Chemical safety assessment**

No Chemical Safety Assessment has been carried out for the substance.

**SECTION 16: Other information**

Code	Description
H260	In contact with water releases flammable gases which may ignite spontaneously.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H335	May cause respiratory irritation.

Code	Hazard class and hazard category	Description
2.12/1	Water-react. 1	Substance or mixture which in contact with water emits flammable gas, Category 1
3.2/2	Skin Irrit. 2	Skin irritation, Category 2
3.3/1	Eye Dam. 1	Serious eye damage, Category 1
3.8/3	STOT SE 3	Specific target organ toxicity — single exposure, Category 3

This document was prepared by a competent person who has received appropriate training.

Main bibliographic sources:

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre, Commission of the European Communities

SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van Nostrand Reinold

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality.

It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This MSDS cancels and replaces any preceding release.

Legend to abbreviations and acronyms used in the safety data sheet:

ACGIH: American Conference of Governmental Industrial Hygienists  
ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.  
AND: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways  
ATE: Acute Toxicity Estimate  
ATEmix: Acute toxicity Estimate (Mixtures)  
BCF: Biological Concentration Factor  
BEI: Biological Exposure Index  
BOD: Biochemical Oxygen Demand  
CAS: Chemical Abstracts Service (division of the American Chemical Society).  
CAV: Poison Center  
CE: European Community  
CLP: Classification, Labeling, Packaging.  
CMR: Carcinogenic, Mutagenic and Reprotoxic  
COD: Chemical Oxygen Demand  
COV: Volatile Organic Compound  
CSA: Chemical Safety Assessment  
CSR: Chemical Safety Report  
DMEL: Derived Minimal Effect Level  
DNEL: Derived No Effect Level.  
DPD: Dangerous Preparations Directive  
DSD: Dangerous Substances Directive  
EC50: Half Maximal Effective Concentration  
ECHA: European Chemicals Agency  
EINECS: European Inventory of Existing Commercial Chemical Substances.  
ES: Exposure Scenario  
GefStoffVO: Ordinance on Hazardous Substances, Germany.  
GHS: Globally Harmonized System of Classification and Labeling of Chemicals.  
IARC: International Agency for Research on Cancer  
IATA: International Air Transport Association.  
IATA-DGR: Dangerous Goods Regulation by the "International Air Transport Association" (IATA).  
IC50: half maximal inhibitory concentration  
ICAO: International Civil Aviation Organization.  
ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO).  
IMDG: International Maritime Code for Dangerous Goods.  
INCI: International Nomenclature of Cosmetic Ingredients.  
IRCCS: Scientific Institute for Research, Hospitalization and Health Care  
KAFH: Keep Away From Heat  
KSt: Explosion coefficient.  
LC50: Lethal concentration, for 50 percent of test population.  
LD50: Lethal dose, for 50 percent of test population.  
LDLo: Leathal Dose Low  
N.A.: Not Applicable  
N/A: Not Applicable  
N/D: Not defined/ Not available  
NA: Not available  
NIOSH: National Institute for Occupational Safety and Health  
NOAEL: No Observed Adverse Effect Level  
OSHA: Occupational Safety and Health Administration  
PBT: Persistent, Bioaccumulative and Toxic  
PGK: Packaging Instruction  
PNEC: Predicted No Effect Concentration.  
PSG: Passengers  
RID: Regulation Concerning the International Transport of Dangerous Goods by Rail.  
STEL: Short Term Exposure limit.  
STOT: Specific Target Organ Toxicity.  
TLV: Threshold Limiting Value.  
TWATLV: Threshold Limit Value for the Time Weighted Average 8 hour day. (ACGIH Standard).  
vPvB: Very Persistent, Very Bioaccumulative.  
WGK: German Water Hazard Class.

**Paragraphs modified from the previous revision:**

- SECTION 1: Identification of the substance/mixture and of the company/undertaking

- SECTION 2: Hazards identification
- SECTION 8: Exposure controls/personal protection
- SECTION 10: Stability and reactivity
- SECTION 11: Toxicological information
- SECTION 12: Ecological information