

SAFETY DATA SHEET- SILICON CARBIDE

According to regulation (EC) No 1907/2006

Section 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product Identifier

Silicon Carbide

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

Use of the substance/mixture

Primarily used as a glaze addition to give localised reduction effect in an electric kiln.

1.3 Details of the supplier of the safety data sheet

Valentine Clays LTD

Valentine Way

Stoke on Trent

ST4 2FJ

t: +44 (0)1782 271200

e: sales@valentineclays.co.uk

w: www.valentineclays.co.uk

1.4 Emergency Telephone Number

+44 (0)1782 271200

Section 2: Hazards Identification

2.1 Classification of the substance or mixture

Not applicable

2.2 Label Elements

Does not require labelling under the CLP Regulation (EC) No. 1272/2008. But please take note of this product information.
 No risk of silicosis during application.

Safety Instructions

Possible dust exposure due to fine dust particles.

2.3 Other Hazards

Not known.

Section 3: Composition/information on ingredients

Chemical Characterisation	EINECS	CAS No	REACH Registration No. CLP Notification No.	Ingredients (Mean Values)	Classification according to CLP Regulation (EC) No. 1272/2008	
					Hazard Classes/ Hazard Categories	Hazard Statements
Silicon Carbide Black (SiC)	206-991-8	409-21-2	01-2119402892-42- XXXXX 02-2119706615-41- 0000	98,00%	-	-
Silicon Carbide Green (SiC green)				99,50%	-	-

Substances listed on the so-called 'Candidate List of Substances of Very High Concern (SVHC) for authorisation' of the European Chemical Agency (ECHA) are not international ingredients of this product. It is therefore not to be expected that those substances are present in quantities of >0.1% in the product.

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Hazardous Substances

No dangerous ingredients.

Substances with prescribed EC Exposure Limits

Does not contain substances with EC Exposure Limits.

Section 4: First Aid Measures

4.1 Description of first aid measures

General Information- Consult a doctor in case of health disorders.

After Inhalation- Provide the affected person with fresh air. Consult a doctor in case of irritation of the respiratory tract.

After Ingestion- Rinse mouth and drink plenty of water. Do not induce vomiting. If you feel unwell, seek medical advice.

After Eye Contact- Remove contact lenses and rinse the eyes with open eyelids for 10 minutes under running water. If necessary, consult an ophthalmologist.

After Skin Contact- Wash with water and rinse.

4.2 Most Important Symptoms and Effects, both Acute and Delayed

Not known.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

Section 5: Firefighting Measures

5.1 Extinguishing Media

Suitable Extinguishing Media

Product does not burn. Match extinguishing measures to ambient situation.

Unsuitable Extinguishing Media

Not known.

5.2 Special Hazards arising from the product

Not known.

5.3 Advice for firefighters

Match the firefighting measures to the environmental conditions

Additional Information

Not known.

Section 6: Accidental Release Measures

6.1 Personal Precautions

Avoid dust formation.

6.2 Environmental Protection Measures

Not known.

6.3 Methods and material for containment and cleaning up

Pick up mechanically and dispose of properly.

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6.4 Reference to other sections

Refer to protective measures in section 7 and 8.

Additional Information

Not Known.

Section 7: Handling and Storage

7.1 Precautions for safe handling

For safety reasons, it is recommended to use a protective sieve during filling

Information on Safe Handling

Avoid dust formation

Information on Fire and Explosion Protection

No special fire protection measures are necessary

Additional Information

Not known

7.2 Conditions for safe storage, including any incompatibilities

Information on storage conditions

Always store product in dry conditions

Requirements for Storage Rooms and Containers

No special requirements needed.

Storage Class VCI

LGK 13 (non-combustible solids)

7.3 Specific end use(s)

Silicon Carbide is used to manufacture or to use as blasting or abrasive medium.

Section 8: Exposure Controls/ Personal Protection

8.1 Control Parameters

Occupational Exposure Limit values in the workplace and/or biological limit values

Occupational Exposure Limits (OEL) in Germany for dusts

Inhalable Fraction (E)- 10 mg/m³

Respirable Fraction (A)- 1.25 mg/ m³

with exceeding factor 2 each, ref. TRGS 900

Community Exposure Limits

Country specific. Please enquire in individual cases.

8.2 Limitation and Monitoring of Exposure

Appropriate Engineering Controls

Technical measures and the application of suitable work processes have priority over the use of personal protective equipment. Provide adequate ventilation. This can be achieved by local suction or general air extraction.

Silicon Carbide is not a hazardous substance, thus only the general dust limit value applies.

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Suitable assessment methods to verify the effectiveness of the protective measures taken include metrological and non-metrological determination methods as described in the Technical Rules for Hazardous Substances (TRGS) 402 and BS EN 14042 "Workplace areas, Guidelines for the implementation and application of processes for assessment of exposure to chemical and biological agents".

Personal Protective Equipment

The use of personal protective equipment is dependent on the concentrations and quality of hazardous substances in their execution in specific workplaces.

Respiratory Protection

Normally, no personal respiratory protective equipment is necessary. In case of insufficient ventilation or exceeded workplace limits, a protective breathing mask should be worn (FFP filtering half mask depending on the existing concentration).

Hand Protection

Glove Material; Leather.

Eye Protection

Tight-sealing protective eyewear (dust-protection goggles) in accordance with EN 166:2001.

Body Protection

With normal use, no body protection by half or full body coverall and boots is required.

Information on Industrial Hygiene

Minimum standards for protective measures when handling working materials are listed in TRGS 500.

Do not eat, drink, smoke or take drugs while using this product.

Avoid contact with skin, eyes and clothing.

Remove soiled or soaked clothing immediately.

Wash hands before breaks and at end of work.

Protect skin by using skin creams.

Environmental Protection Measures

See sections 6 and 7; no further action is required.

Section 9: Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

Appearance

Appearance- Angular

Physical State- Solid

Colour- Black/Green

Odour- Odourless

Safety Data

Explosion Hazard- The product itself is not explosive; however, formation of explosive air/dust mixtures if possible.

Lower Explosion Limit- Not known.

Upper Explosion Limit- Not known.

Vapour Pressure- Not relevant.

Specific Gravity- Approx. 3.2 g/cm³.

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Flow Time- Not relevant.

Water Solubility- Insoluble in Water

pH Value- Not applicable

Boiling Point/ Range- Not applicable

Flash Point- Not determined as product is not flammable.

Melting Point- Approx. 2 300°C.

Ignition Temperature- Not determined as product is not flammable.

9.2 Other Information

None.

Section 10: Stability and Reactivity

10.1. Reactivity

Silicon Carbide is non-reactive and does not change with proper handling and storage.

10.2. Chemical stability

Silicon Carbide is chemically stable and does not change with proper handling and storage.

10.3. Possibility of hazardous reactions

No hazardous reactions known.

10.4. Conditions to avoid

Not decomposition if used according to specifications.

10.5. Incompatible materials

No hazardous reactions known.

10.6. Hazardous decomposition products

No known hazardous decomposition products.

Section 11: Toxicological Properties

11.1 Information on toxicological effects

According to current IFA report the product contains no silicosis-including, toxic and carcinogenic components. The indications given in Section 8 of this product information must be observed.

Acute toxicity- No data on the product available.

Irritation- No data on the product available.

Corrosivity- No data on the product available.

Sensitisation- No data on the product available.

Repeated dose toxicity- No known toxicity of Silicon Carbide.

CMR effects (carcinogenic, mutagenic and toxic to reproduction)- No carcinogenic effect according to IFA reports.

Summarised evaluation of the CMR properties- No known CMR properties.

Practical experience (relevant for classification and other observations)- No data on the product available.

Carcinogenicity- No known carcinogenicity of Silicon Carbide.

Mutagenicity- No data on the product available.

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Reproductive Toxicity- No data of the product available.

Other Information- Not known.

Section 12: Ecological Information

12.1. Toxicity

No known effects.

Ecotoxicity

For Silicon Carbide no environmental problems are to be expected when handled and used properly.

Fish Toxicity

Harmful effects for aquatic organisms are not expected.

Aquatic Invertebrates

Harmful effects for aquatic organisms are not expected

Water Plants

Harmful effects for aquatic organisms are not expected

12.2. Persistence and degradability

Based on current experience, this product is inert and non-degradable.

12.3. Bio accumulative potential

No data available. Accumulation in biological materials is rather unlikely as it is inert.

12.4. Mobility in soil

Potential not known.

12.5. Results of PBT and vPvB assessment

Not relevant. The substances in this product do not meet the criteria for classification as PBT or vPvB.

12.6. Other harmful effects

Not known.

Section 13: Waste Disposal

13.1 Waste treatment methods

Product

Silicon Carbide. If recycling is not possible, waste must be disposed of in compliance with national and local regulations. Conform the exact waste code with the disposer

Waste Code according to European Waste Catalogue (EWC)

12 01 17 waste blasting material other than those mentioned in 12 01 16

Recommendation

Contact Valentine Clays for the recycling of used Silicon Carbide.

13.2 Packaging

National and local regulations must be followed.

Contaminated packaging

Packaging with Silicon Carbide residues can be recycled

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Cleaned Packaging

Packaging can be reused after being cleaned or recycled.

Section 14: Transport Information

Silicon Carbide is no Dangerous Good.

Section 15: Regulatory Information

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

EU Regulations

Not Known

National Regulations

Water Hazard Class- Not hazardous to water, classification according to VwVWS, Annex 4.

Technical Instruction on air quality (TA-Luft)- Substances not mentioned by name.

Hazardous Incident Ordinance (1. BImSchV [German Federal Immission Control Regulation])- Substances not mentioned by name.

Solvents Ordinance (31. BImSchV [German Federal Immission Control Regulation])- Substances not mentioned by name

Chemicals Prohibition Ordinance- Substances not mentioned by name.

Relevant Technical Rules for Hazardous Substances- Contains no hazardous substances.

Employment Restrictions- Not known

Miscellaneous

Silicon Carbide is not subject to the VOC Regulation.

International Regulations

Not known.

15.2 Chemical Safety Assessment

Not relevant.

Section 16: Other Information

Further applicable EC directives

Not known.

Restrictions on use recommended by the manufacturer

For industrial application only.

Other Information

The product information in this documentation is correct to the best of our knowledge at the time of printing. The information is intended to provide you with advice on safe handling of the product mentioned in this product information for storage, processing transport and disposal. The information cannot be applied to other products. If the product mentioned in this documentation is in any way tampered with i.e. mixed with other materials, processed or undergoes processing, the information as supplied in this document no longer applies to the new product unless expressly stated otherwise.

Changes since the last version

2017-06-19 EINCS and CAS corrected

2018-05-16 Complement REACH registration number

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2018-07-17 Advice Protective Sieve

Literature and Data Sources

REACH Regulation (EC) No. 1907/2006

CLP Regulation (EC) No. 1272/2008

Hazardous Substances Ordinance (GefStoffV)

Commission Decision 200/532/EC (AVV)

Transport Regulations according to ADR, RID and IATAA

TRGS 900

VOC Regulation (ChemVOCFarbV)

Hazard Statements, referred to in section 2 and 3 according to Regulation (EC) No. 1272/2008

None

This data sheet is provided under CLP and REACH Regulation and is not intended to constitute an assessment of workplace risk associated with product(s) used as required under any other Health and Safety Regulation.

Workers must be informed of the presence of crystalline silica and trained in the proper use and handling of this product as required under applicable regulations.

Date of Issue: January 2020

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