



## Safety Data Sheet

(in accordance with 91/155/EC, 2001/58/EC)

### 1 Identification of the substance/preparation and of the Company/undertaking

#### 1.1 Identification of the substance or preparation

VULCASIL SRP46

#### 1.2 Use of the substance/preparation

Refractory applications, such as kiln furniture, furnace linings, molten metal linings.

#### 1.3 Company/undertaking identification

Company:

Vulcan Refractories Limited  
Brookhouses Industrial Estate  
Cheadle  
Staffordshire ST10 1PN  
United Kingdom

Contact details:

Telephone: (44) 01538-752238  
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Email: [enquiries@vulcanrefractories.com](mailto:enquiries@vulcanrefractories.com)

### 2 Composition/information on ingredients

Description: Silicon-carbide refractory material, supplied as solid blocks/shapes.

Substance	Content	CAS number	Classification	Risk phrases
Silicon carbide	70-85 wt.%	409-21-2	--	--
Silicon nitride/oxynitride	15-30 wt.%	12033-89-5	--	--
Silicon oxide	0-3 wt.%	7631-86-9	--	R20
Iron oxide	<1 wt.%	1309-37-1	--	--

### 3 Hazards identification

The product poses no special hazards as supplied.

Skin: Not applicable  
Eye: Not applicable  
Inhalation: Not applicable  
Ingestion: Not applicable

### 4 First aid measures

Due to the physical nature of the product, the following is only relevant in case of cutting.

Skin: Wash off any dust.  
Eye: Rinse with plenty of clean water. Seek medical attention if irritation persists.  
Inhalation: Remove to fresh air.  
Ingestion: Not applicable



## 5 Fire-fighting measures

The product is non-combustible and does not pose a fire hazard.

Suitable extinguishing media:	Not applicable
Extinguishing Media NOT to be used:	Not applicable
Special exposure hazards/combustion products:	Not applicable
Special protective equipment	Not applicable

## 6 Accidental release measures

Personal precautions:	No special precautions are required.
Environmental precautions:	No special precautions are required.
Cleaning methods:	No special methods. If cutting dust is present, vacuum up any waste.

## 7 Handling and storage

7.1 Handling:	No special precautions are required.
7.2 Storage:	No special precautions are required.
7.3 Specific use:	The product is recommended to be stored in dry conditions. If product becomes damp/wet, it must be dried before use in hot applications to prevent rapid steam formation.

## 8 Exposure controls

### 8.1 Exposure limit values

No exposure limits apply to the solid product as supplied.

Workplace Exposure Limits (WEL) for the dust when cutting are as for nuisance dust:

- WEL - 8 hour TWA: Inhalable  $10 \text{ mg.m}^{-3}$
- WEL. -8 hour TWA: Respirable  $4 \text{ mg.m}^{-3}$

### 8.2 Exposure controls

The only exposure is likely to be skin contact from handling of the solid shapes. Nuisance dust may be generated when product is cut (wet cutting is recommended).

Respiratory protection:	Nuisance dust mask when cutting.
Hand protection:	Gloves recommended to minimise mechanical abrasion.
Eye protection:	Protective eyewear recommended when cutting.
Skin protection:	Overalls recommended to prevent mechanical abrasion.
Other:	Safety footwear recommended.
Environmental controls:	No special controls are required.



## 9 Important health, safety and environmental information

9.1	Appearance:	Grey solid.
	Odour:	None.
9.2	pH:	Neutral.
	Boiling point:	Not applicable
	Melting point:	Not applicable.
	Flash point:	No flash point.
	Flammability (solid/gas):	Not flammable.
	Explosive properties:	Not explosive.
	Oxidising properties:	Slow oxidation above 800°C to form silica.
	Vapour pressure:	Not applicable.
	Relative density:	2650 kg.m <sup>-3</sup>
	Solubility:	Not soluble in water.
	Partition co-efficient:	Not applicable.
	Viscosity:	Not applicable.
	Vapour density:	Not applicable.
	Evaporation rate:	Not applicable.
	Other information:	No other relevant information.

## 10 Stability and reactivity

The product is stable and not reactive under normal conditions.

10.1	Conditions to avoid:	None known of.
10.2	Materials to avoid:	None known of.
10.3	Hazardous decomposition products:	Silicon carbide and silicon nitride can transform to silica after prolonged high temperature (+1000°C) use.

## 11 Toxicological information

Skin contact:	Mechanical irritation.
Eye contact:	Mechanical irritation.
Inhalation:	Irritation of the upper air passage (if dust is generated by cutting the product)
Ingestion:	Not applicable.
Long term effects:	No known effects.

## 12 Ecological information

The product is stable, with no adverse ecological effects.

## 13 Disposal considerations

The product as supplied is not subject to any special waste disposal restrictions.

As supplied product: Dispose of according to statutory requirements.

Used product: Customers are advised to evaluate any changes or contamination to the product that may occur during use. Dispose of according to statutory requirements.

## 14 Transport information

This is a non hazardous material. It is not classified as dangerous goods for the purposes of road, rail or air transport.



**15 Regulatory information**

No additional regulatory information is known to apply to this product.

**16 Other information**

R phrases:

None Not applicable

S phrases:

None Not applicable

Training advice: Ensure users of this product are aware of relevant safety data information.

Recommended uses: Refractory applications, such as kiln furniture, furnace linings, molten metal linings.

Recommended restrictions None

Further information: None

Sources of key data: Health & Safety Executive Guidance Note EH40/2005 - Workplace Exposure Limits  
ESIS: European Chemical Substances Information System  
Commission Directive 91/155/EEC  
Commission Directive 2001/58/EC

The information contained in this data sheet is to the best of our knowledge and belief, accurate and reliable as of the date indicated. All materials may contain unknown hazards and should be used with caution. Whilst certain known hazards are described herein, we cannot guarantee that these are the only hazards that exist.