



## Product Safety Information

According to Article 32 (non hazardous substance) Regulation (EC) No 1907/2006 (REACH)

### 1. Identification of the product and supplier

Product name:	<b>SICOMILL</b>
Application of the product:	Raw material when manufacturing engineering ceramics and other industrial applications. Applications range from ceramic bearings and cutting tools to pyrotechnical mixes.
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### 2. Hazards Identification

Classification of the substance: The product does not meet the criteria for hazards classification in accordance with Directive 67/548/EEC (DSD) and Regulation (EC)

Hazard symbol	N/A
Symbol letter	N/A
R-/H-phrases	N/A
S-/P-phrases	N/A

Silicon dust suspended in air may under certain conditions cause dust explosions (See section 10)

### 3. Composition/Information on Ingredients

Synonyms/Trade names:	
IUPAC Name:	Silicon
EC Registry Number:	231-130-8
CAS Registry Number:	7440-21-3
Component Percent:	Min. 98% SILICON POWDER; POLYCRYSTALLINE



#### 4. First Aid Measures

Inhalation:	Remove from exposure area to fresh air immediately
Skin contact:	Wash with soap or mild detergent.
Eye contact	Wash eyes immediately with large amounts of water
Ingestion	Rinse mouth with water

#### 5. Fire fighting Measures

Extinguishing Media:	Use dry sand powder, alternatively carbon dioxide extinguisher. Do not apply water to burning material
Firefighting:	Move container from fire area if possible, Cool down the outside of container. Avoid breathing vapours or dusts; keep upwind
Point of Hazard:	Silicon-dust in air may under certain conditions cause dust explosions. See section 10.

#### 6. Accidental Release Measures

Occupational Spill:	Shut off ignition sources. For small spills, sweep up with a minimum of dusting. For larger spills, wet down with water and dike for later disposal. No smoking, flames or flares in hazard area.
Personal protective Equipment:	If needed use protective inhalation and protective gloves.

#### 7. Handling and storage

Handling:	Avoid handling that generates dust build up. Avoid ignition sources (e.g. welding) in areas with high dust concentrations
Storage:	Keep product dry



## 8. Exposure Controls/Personal Protection

**A. Occupational exposure controls:** Eye protection, eye flushing facilities and protective gloves. Ensure good ventilation. Wear a particulate respirator according to EN 149 FFP 2S in areas of inadequate ventilation.

Occupational Exposure Limits:

Substance: PNOS

8hr TWA: 10 mg/m<sup>3</sup> inhalable fraction 3 mg/m<sup>3</sup> respirable fraction

## 9. Physical and Chemical Properties

Description:	Dark black to brown powder
Structure:	Crystalline
Molecular Weight:	28
Molecular Formula:	Si
Melting Point:	1410°C
Specific Gravity:	2.300 kg/m <sup>3</sup>
Bulk Density:	650 - 1,200 kg/m <sup>3</sup> depending on milling grade
Water Solubility:	Insoluble
Explosion area in air:	100 g/m <sup>3</sup> to 5,000 g/m <sup>3</sup>

## 10. Stability and reactivity

Hazard Fragmentary:	Stable under normal temperatures and pressures
Hazard Reactivity:	During heating material can react with water while hydrogen gas can be produced. It is also possible to get hydrogen gas during milling in water. It can react with oxidizing agent.
Conditions to Avoid:	Prevent dispersion of dust in air. Keep sparks or flames away from the product.
Hazardous Decomposition products:	Reaction with hydrofluoric acid (HF) and nitric acid (HNO <sub>3</sub> ) may lead to the formation of toxic gases like silicon tetra-fluoride (SiF <sub>4</sub> ) or nitrous gases (NO <sub>x</sub> ). Silicon may react with acids forming flammable gases such as hydrogen (H <sub>2</sub> ) and silane (SiH <sub>4</sub> ). Wet silicon powder will



form flammable hydrogen gas, due to decomposition of water.

## 11. Toxicological Information

The product does not meet the criteria for hazard classification according to Directive 67/548/EEC (DSD and regulation (EC) No 1272/2008 (CLP)

Acute effects:

Inhalation:	Fine dust particles may irritate and dehydrate mucous membranes.
Skin contact:	Dust may irritate and dehydrate skin.
Eye contact:	Dust may irritate and cause dryness.
Ingestion:	Dust may irritate and dehydrate mucous membranes.
Chronic effects:	No chronic effects are known. Silicon powder is not known to be a reproductive toxin or mutagen.

## 12. Ecological Information

The product is not characterised as dangerous for the environment.

Mobility:	The alloy has poor mobility under normal environmental conditions.
Persistence:	Not relevant for metalloids.
Bioaccumulation:	Not relevant, due to low mobility and non-dispersive use.
Eco-toxicity:	The product does not meet the classification criteria for eco-toxicological endpoints in accordance with Directive 67/548/EEC (DSD) and Regulation (EC) 1272/2008 (CLP).

## 13. Disposal Considerations

The material should be recovered for recycling if possible.

The product is not regulated as hazardous waste according to Directive 2001/118/EEC, nor is it listed on EU's list of wastes (2000/532/EC). Disposal of materials must conform to the requirements of Section 34 of the Environmental Protection Act 1990, UK. This material is not classed as "Special Waste" under the Control of Pollution (Special Waste) Regulations 1996. Prior to disposal of large quantities of this material advice should be sought from the local Environment Agency Office.

## 14. Transport information

UN	-
IMDG/IMO	Not subject to classification
ADR/RID	Not subject to classification
ICAO/IATA	Not subject to classification

## 15. Regulatory Information

A chemical safety assessment (CSA) has been carried out for the substance in accordance with Regulation (EC) 1907/2006 (REACH).

The text of this Product Safety Information is prepared in compliance with:

- Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) and subsequent amendments.
- Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

## 16. Other Information

According to Chapter 1.5.2 of the UN Globally Harmonized System of Classification and Labelling of Chemicals (GHS), Article 58 (2)(a), and Article 59(2)(b) of (EC) No 1272/2008 (CLP), which amends REACH article 31(1), safety data sheets (SDS) are only required for substances and mixtures that meet the harmonised criteria for physical, health or environmental hazards. Since this product does not meet these criteria, a SDS according to 453/2010/EC is not issued. In order to communicate relevant HSE-(health, safety and environmental-) information, this product safety information (PSI) is provided instead. REACH article 31(7) requires relevant exposure scenarios from the Chemical Safety Report (CSR) to be annexed to the SDS. However, according to REACH Annex I, section 0. (Introduction), subsection 0.6. no 4 and 5, exposure scenarios are only required for hazard-classified substances or mixtures. Since this product is not hazard-classified according to CLP, there is no requirement for exposure scenarios.

Legal Disclaimer:

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