

## Material Safety Data Sheet

### Scatter 4 – 0.3 – 0.65mm

#### 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY

##### 1.1 Identification of the substance or preparation

Quartz –Scatter 4 (0.3 – 0.65mm)

##### 1.2 Use of the substance/preparation

Main applications of quartz – non exhaustive

Glass, silicate chemistry, abrasives, foundry sand, filler for textured coatings, glues and mortars, filtration, sports and leisure, specialist construction etc.

##### 1.3 Company/undertaking identification

Company Name:	Flowcrete SA (Pty) Ltd	PO Box 12241
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	Jacobs	4026
Tel No	(031) 461 3411	
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#### 2. COMPOSITION/INFORMATION ON INGREDIENTS

2.1	<b>Chemical:</b>	SiO <sub>2</sub>
2.2	<b>Mineralogical:</b>	alpha quartz
2.3	<b>C.A.S. No</b>	14808-60-7
2.4	<b>IUPAC Name</b>	Silicon Dioxide

#### 3. PHYSICAL & CHEMICAL CHARACTERISTICS

##### 3.1 General Information

Physical State:	Solid
Appearance:	Granular, white to cream in colour
Odour:	Odourless

##### 3.2 Important health, safety and environmental information

Specific Gravity:	2.65g/cm <sup>3</sup>
SiO <sub>2</sub> %	99%
Grain Shape:	sub-angular
Particle size	0.1-10mm
Solubility in water:	Negligible
Solubility hydrofluoric acid:	Less than 1%

##### 3.3 Other information

Melting Point:	1610°C
Molecular Weight:	60.1

#### 4. HAZARD IDENTIFICATION

4.1 The grain size distribution of quartz means that it is not hazardous. However, any respirable crystalline silica dust generated by processing and handling of quartz may cause health effects. Prolonged and/or massive inhalation of respirable crystalline silica dust may cause lung fibrosis,

commonly referred to as silicosis. Principal symptoms of silicosis are cough and breathlessness. Occupational exposure to respirable crystalline silica dust should be monitored and controlled.

## 5. FIRE – FIGHTING MEASURES

- 5.1** Does not burn. No hazardous releases in case of fire.

## 6. STABILITY AND REACTIVITY

- 6.1** Chemically stable, no particular incompatibility.

## 7. TOXICOLOGICAL INFORMATION

- 7.1** No toxicity data is available for this product.
- 7.2** Prolonged and/or massive exposure to respirable crystalline silica-containing dust may cause silicosis, a nodular pulmonary fibrosis caused by deposition in the lungs of fine respirable particles of crystalline silica.
- 7.3** In 1997, IARC (the International Agency for Research on Cancer) concluded that crystalline silica inhaled from occupational sources can cause lung cancer in humans. However it pointed out that not all industrial circumstances, nor all crystalline silica types, were to be incriminated. (IARC Monographs on the evaluation of the carcinogenic risks of chemicals to humans, Silica, silicates dust and organic fibres, 1997, Vol. 68, IARC, Lyon, France.) In June 2003, SCOEL (the EU Scientific Committee on Occupational Exposure Limits) concluded that the main effect in humans of the inhalation of respirable crystalline silica dust is silicosis. "There is sufficient information to conclude that the relative risk of lung cancer is increased in persons with silicosis (and, apparently, not in employees without silicosis exposed to silica dust in quarries and in the ceramic industry). Therefore preventing the onset of silicosis will also reduce the cancer risk..." (SCOEL SUM Doc 94-final, June 2003). There is a body of evidence supporting the fact that increased cancer risk would be limited to people already suffering from silicosis. According to the current state of the art, worker protection against silicosis can be consistently assured by respecting the existing regulatory occupational exposure limits.

## 8. FIRST AID MEASURES

- 8.1** No actions are to be avoided, nor are there any special instructions for rescuers.
- Eye contact** Wash with copious quantities of water.
- Ingestion** Non-toxic.
- Inhalation** No special first aid measures. Remove to fresh air and consult a physician.
- Skin contact** No special first aid measures necessary.

## 9. EXPOSURE CONTROLS/PERSONAL PROTECTION

- 9.1 Exposure limit values**  
Respect workplace regulatory provisions for all types of airborne dust (inhalable dust, respirable dust and respirable crystalline silica dust). Exposure to dust concentrations in excess of 10mg per cubic meter of air sampled for total dust, and 5mg per cubic meter for respirable dust, could cause silicosis.

### 9.2 Exposure controls

#### 9.2.1 Occupational exposure controls

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Provide appropriate local exhaust ventilation in places where dust is generated. Control of occupational exposure may also be achieved by enclosing plant and equipment, by isolating personnel from dusty areas and by ensuring good standards of ventilation in the workplace.

#### 9.2.1.1 Respiratory protection

In case of exposure to airborne dust concentrations exceeding regulatory limits, wear a personal respirator that complies with the requirements of national legislation

#### 9.2.1.2 Eye protection

Wear safety glasses with side-shields in circumstances where there is a risk of penetrative eye injuries.

#### 9.2.2 Environmental exposure controls

No special requirements.

### 10. ACCIDENTAL RELEASE MEASURES

#### 10.1 Personal precautions

Avoid airborne dust generation. In case of exposure to airborne dust concentrations exceeding regulatory limits, wear a personal respirator in compliance with national legislation.

#### 10.2 Environmental precautions

No special requirements.

#### 10.3 Methods for cleaning up

Avoid dry sweeping and use water spraying or vacuum cleaning systems to prevent airborne dust generation.

### 11. HANDLING AND STORAGE

#### 11.1 Handling

Avoid airborne dust generation.

Provide appropriate exhaust ventilation at places where airborne dust is generated. In case of insufficient ventilation, wear suitable respiratory protective equipment. Please contact your supplier if you require advice on safe handling techniques.

#### 11.2 Storage

Technical measures / Precautions Ensure abatement of dust produced during the loading of silos. Keep containers closed and store/handle bagged products so as to prevent accidental bursting.

#### 11.3 Specific use(s)

When mixing with other substances the afore-mentioned safe handling advice shall apply.

### 12. ECOTOXICOLOGICAL INFORMATION

#### 12.1 No specific adverse effects known.

### 13. DISPOSAL CONSIDERATIONS

#### 13.1 Can be land filled in compliance with local regulations. The material should be buried to prevent dust being picked up by the wind. Where possible, recycling is preferable to disposal.



#### **14. TRANSPORT INFORMATION**

- 14.1** No special precautions are required under regulations relating to the transportation of dangerous goods.

#### **15. OTHER INFORMATION**

- 15.1** The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, express or implied, is made with respect to the information contained herein. It is the user's obligation to determine the conditions of safe use of this product.