

## Silica Cloth Health and Safety Data Sheet

- SLEEVINGS
- GLASS CLOTH
- HEAT SHIELDS
- WRAP (FROM SLITTED CLOTH)

### 1. Composition

The products covered by this data sheet are made from silicon dioxide fibres. These are manufactured by chemically leaching continuous filament fibres made from borosilicate E glass (CAS – 65997-17-3). A process which results in the production of hydrated amorphous silica. The filament diameters are uniform, size approx 8 microns and are therefore above the maximum size considered to be respirable. They will not sub divide into fibrils of smaller diameter. The fibres contain small amounts of hydro-carbon surface dressing. The vermiculite coating is non hazardous.

### 2. Hazard Identification

Silica cloth is labelled for identification purposes only being of low hazard. Typical Composition of 'E' glass

### 3. First Aid Measure

#### Inhalation

In the unlikely event of excessive inhalation of dust, (or fumes from a sustained fire situation) remove the individual to the fresh air. Obtain medical advice.

#### Skin Irritation

In the unlikely event of skin irritation wash affected part with mild soap and water. If irritation persists obtain medical advice. Long sleeved, loose fitting clothing made from cotton is advisable. Gloves and eye protection are suggested for certain operations and washing with soap and water after handling is helpful. Irritation to the eyes, nose and throat is less frequent than irritation to the skin.

#### Eye Irritation

Irrigate eyes if affected by entry of dust. Obtain medical advice if irritation persists.

## 4. Fire Fighting Measures

### Flammability

The materials will not support combustion

### Special Fire Fighting Procedures

In a sustained fire the products will degrade and the surface dressings and finishes will give rise to irritant fumes and smoke, including carbon monoxide, carbon dioxide and silicone dioxide. Appropriate personal protection and approved forms of self-contained breathing apparatus should therefore be worn in such situations.

### Extinguishing media

Use that appropriate to surrounding fire.

## 5. Accidental Release Measures

Products damaged or friable should be handled with the use of personal protective equipment.

## 6. Handling and Storage

It is unlikely that these products will give rise to significant amounts of dust during normal handling and dust control measures will rarely be required in circumstances involving fabrication of products from these materials. However, in accordance with good working practices the production of debris should be minimised and the accumulation of dust should be removed by dustless methods. No special storage conditions are required on health grounds.

## 7. Exposure Control / Personal Protection

Occupational exposure to man-made mineral fibre dust of non-respirable size should be kept to the minimum that is reasonably practicable and should not exceed the following limits:

### Amorphous silica (Occupational Exposure Limits)

Total	6mg/m <sup>3</sup>
Respirable	2.4mg/m <sup>3</sup>

### Cristobalite (Maximum Exposure Limit) 0.3mg/m<sup>3</sup>

Only if the materials are being handled extremely vigorously or subjected to harsh abrasion are dust levels likely to rise above the exposure limit. In such circumstances the provision of local exhaust ventilation should be considered, or if this is not practicable, dust masks should be worn approved for use against irritant dust. These should be worn in accordance with manufacturers instructions.

To reduce the chance of skin irritation when handling silicon dioxide fibre based materials, overalls of a close weave material should be worn. Gloves, arm cuffs or barrier creams may also be advantageous in some circumstances. However, emphasis should be placed on personal hygiene and hands and arms should be rinsed copiously under running water before washing. Where there is a possibility of fibre entering the eye, suitable eye protection should be worn.

## 8. Stability and Reactivity

The products are designed for use at high temperature (up to 950°C). At temperatures above 900°C some changes will occur giving rise to the formation of cristobalite.

Subject to the above the products are considered to be stable when used for the intended range of applications.

## 9. Disposal Considerations

The disposal of waste should be carried out in accordance with national or regional directives – normally by burial in controlled industrial landfill sites.

### Aluminium Foil Laminated Cloths

- a) The application of aluminium foil, ranging from 20 to 30 microns in thickness or
- b) The application of PET film, metallised on one or both surfaces.

The foil or film is bonded to one surface of the base fabric by means of an aliphatic Polyurethane adhesive which has been optimised for flame retardant performance by the incorporation of a synergistic blend of Antimony Trioxide (CAS – 1309-64-4) and Decabromodiphenyl Oxide (CAS-1163-19-5). These compounded additives are fully bonded into the adhesive polymer and are therefore not present as free agents.

## 10. Other Information

### References

1. Health & Safety Executive Guidance Note EH 40/2000 Occupation Exposure Limits 2000

No specific regulatory information is applicable to these products. Not classified as dangerous for supply or use.