

# SAFETY DATA SHEET

## FUSED SILICA GLASS

According to Regulation (EC) No.1907/2006 (REACH)



Revision 2016 : Issued 24<sup>th</sup> August 2016

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

#### 1.1. PRODUCT IDENTIFIERS:

Product Name: Fused silica glass (SiO<sub>2</sub>)  
Synonyms, Trade Names: Fused Quartz, Amorphous Fused Silica, Spectrosil®, Vitreosil®, Suprasil®, Herasil®, Dynasil®

#### 1.2. RELEVANT IDENTIFIED USES OF THE SUBSTANCE OR MIXTURE AND USES ADVISED AGAINST

Identified Uses: Optical Material for manufacture of Optical Components.

#### 1.3. DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET

Company: CRYSTRAN LTD, 1 Broom Road Business Park, Poole, Dorset UK BH12 4PA  
☎ +44 1202 307650

#### 1.4. EMERGENCY TELEPHONE NUMBER

Emergency Phone: ☎ +44 1202 307650 (Monday to Friday 08:30 to 17:00 GMT)  
Emergency Action: In the event of a medical enquiry involving this product, please contact your doctor or local hospital accident and emergency department. The attending health professional will be able to contact the National Poisons Information Service.

### 2. HAZARDS IDENTIFICATION

#### 2.1. CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

No Hazardous Product as specified in Directive 67/548/EEC.

#### 2.2. LABEL ELEMENTS

Precautionary Statements:  
P262 Do not breathe dust/fume/gas/mist/vapours/spray.

#### 2.3. OTHER HAZARDS

None



### 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### 3.1. SUBSTANCES

Component Name	CAS number	%	EC number (EINECS)	EU index	UN number
Silicon Dioxide	60676-86-0 *	100%	262-373-8	-	-

- Refer to the notes on CAS number in Section 16

### 4. FIRST AID MEASURES

#### 4.1. DESCRIPTION OF FIRST AID MEASURES

GENERAL: Consult a doctor for specific advice.  
EYES: Irrigate thoroughly with water for at least 15 minutes. If discomfort persists obtain medical attention.  
SKIN: Wash thoroughly with soap and water.  
INHALATION: Remove to fresh air. Obtain medical attention.  
INGESTION: Wash out mouth thoroughly with water. In severe cases obtain Medical Attention.

#### 4.2. MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED

Refer to Section 2.2 and to section 11.

#### 4.3. INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED

No Data.

### 5. FIRE FIGHTING MEASURES

#### 5.1. EXTINGUISHING MEDIA

This product does not burn.

#### 5.2. SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE

None Known

#### 5.3. ADVICE FOR FIREFIGHTERS

Use breathing apparatus if necessary.

### 6. ACCIDENTAL RELEASE MEASURES

#### 6.1. PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

None

#### 6.2. ENVIRONMENTAL PRECAUTIONS

Prevent further leakage or spillage.

#### 6.3. METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP

Dispose of as normal waste.

#### 6.4. REFERENCE TO OTHER SECTIONS

None

### 7. HANDLING AND STORAGE

#### 7.1. PRECAUTIONS FOR SAFE HANDLING:

7.2. Protect against physical damage and avoid generating dust.

#### 7.3. CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES

No special precautions needed.

#### 7.4. SPECIFIC END USES

Optical Material for Manufacture of Optical Components.

## CRYSTRAN LTD

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Registered in England No.2863378

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### 8. EXPOSURE CONTROL AND PERSONAL PROTECTION

#### 8.1. CONTROL PARAMETERS

**OCCUPATIONAL EXPOSURE LIMITS (OEL) – Total inhalable silica dust: Long term 0.1 mg/m<sup>3</sup>**

**EXPOSURE CONTROLS:** Use of a laboratory coat is suggested. Safety goggles or safety glasses with side shields are required if there is any possibility of chipping or dust creation. Avoid breathing dust when generated. Wash hands immediately after handling the product.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

#### 9.1. INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE :	Clear geometric shapes, no odour.	FLASH POINT:	Not Applicable
BOILING POINT (760mm Hg)	2230°C	FLAMMABILITY:	Not Applicable
MELTING POINT:	1600°C	EXPLOSIVE PROPERTIES:	Not Applicable
SPECIFIC GRAVITY:	2.203 g/mL	VAPOUR PRESSURE:	Negligible at 25°C
SOLUBILITY IN WATER:	Practically soluble.	pH IN AQUEOUS SOLUTION:	Not determined

#### 9.2. OTHER SAFETY INFORMATION

None

### 10. STABILITY AND REACTIVITY

#### 10.1. REACTIVITY

Reacts with some mineral acids.

#### 10.2. CHEMICAL STABILITY

Stable under normal conditions of storage and use.

#### 10.3. POSSIBILITY OF HAZARDOUS REACTIONS

None known

#### 10.4. CONDITIONS TO AVOID

Strong hot alkali solutions and Hydrofluoric, Fluosilicic and Phosphoric Acids

#### 10.5. INCOMPATIBLE MATERIALS

Strong Mineral Acids.

#### 10.6. HAZARDOUS DECOMPOSITION PRODUCTS

Normally none

### 11. TOXICOLOGICAL INFORMATION

#### 11.1. INFORMATION ON TOXICOLOGICAL EFFECTS

Particular care should be exercised when machining and creating dust or particles.

**TOXIC DOSE - LD50** 3160 mg/kg (oral, rat)

**CARCINOGENICITY:** No evidence of carcinogenic properties.

**MUTAGENICITY/TERATOGENICITY:** No evidence of reproductive effects.

### 12. ECOLOGICAL INFORMATION

#### 12.1. TOXICITY

No Data

#### 12.2. PERSISTENCE AND DEGRADABILITY

No Data

#### 12.3. BIOACCUMULATIVE POTENTIAL

No Data

#### 12.4. MOBILITY IN SOIL

No Data

#### 12.5. RESULTS OF PBT AND vPvB ASSESSMENT

Not required or conducted

#### 12.6. OTHER ADVERSE AFFECTS

No environmental hazard is anticipated provided that the material is handled and disposed of with due care and attention.

### 13. DISPOSAL CONSIDERATIONS

#### 13.1. WASTE TREATMENT METHODS

Should be disposed of carefully in designated glass disposal bins..

### 14. TRANSPORT INFORMATION

#### 14.1. UN NUMBER: None

#### 14.2. UN PROPER SHIPPING NAME:

Not subject to transportation regulations.

#### 14.3. TRANSPORT HAZARD CLASS: None

#### 14.4. PACKING GROUP: None

#### 14.5. ENVIRONMENTAL HAZARDS: None

#### 14.6. SPECIAL PRECAUTIONS FOR USER: None

#### 14.7. TRANSPORT IN BULK MARPOL / IBC: No Data

### 15. REGULATORY INFORMATION

#### 15.1. SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS / LEGISLATION SPECIFIC FOR THE SUBSTANCE OR MIXTURE

TSCA: Listed in the TCSA Inventory

### 16. OTHER INFORMATION

\* **NOTE:** The assignment of a CAS number to Silicon Dioxide is confused.

**CAS # 60676-86-0**

Described as "Amorphous Fused Silica", "Fused Silica Dioxide", "Quartz Glass", "Silica Glass" is valid and used in other manufacturers MSDS for similar product.

**CAS# 7631-86-9**

Described as "Silica", "Silica Dust", or fused "Fused Silica Dioxide." is valid but more appropriate to the powdered precursor product,

**CAS # 15468-32-3**

Described as "Silica", "Silica Dust" or "Quartz Glass" is valid but not commonly used in other manufacturers MSDS for similar product.

**CAS # 14808-60-7**

Described as "Silica", "Silica Dust", "Silica Sand" or "Quartz crystal" is valid but considered by us to be more applicable to Crystalline Quartz.

The choice of CAS # does not significantly affect the advice given in this MSDS sheet.

Spectrosil®, Vitreosil®, Suprasil®, Herasil®, Dynasil® are registered trademarks of major manufacturers of bulk supply of fused silica optical glass.

**REVISION DATE:** 23<sup>rd</sup> August 2016 ©2016 Crystran Ltd.

The above information is believed to be correct but does not purport to be all inclusive and must be used only as a guide.

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