

## SAFETY DATA SHEET

(in compliance with Regulation (EC) 1907/2006, Regulation (EC) 1272/2008  
and Regulation (EC) 453/2010)

**GRANUSIL**  
*Cristobalite sand*

*Without classification (RCS < 1%)*

*(Update September 2014)*

### **SECTION 1 : IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING**

#### **1.1. Product identifier**

Product :	Cristobalite sand
REACH Registr. n° :	Exempted in accordance with Annex V.7
Trade name :	GRANUSIL

#### **1.2. Relevant identified uses of the substance or mixture and uses advised against**

Main applications of cristobalite sand - non-exhaustive list: paint, ceramics, glass fibre, adhesives, plastics, rubber sealants, special concrete, silicone etc.

#### **1.3. Details of the supplier of the safety data sheet**

**SILMER**  
**Rue Ancel de Caïeu**  
**80410 CAYEUX SUR MER**  
☎ (33) 3 22 26 61 00  
☎ (33) 3 22 26 59 24  
[www.silmer.fr](http://www.silmer.fr)  
[silmer@gagneraud.fr](mailto:silmer@gagneraud.fr)

#### **1.4. Emergency telephone number**

(33) 3 22 26 61 00

Not available outside office hours

## **SECTION 2 : HAZARDS IDENTIFICATION**

### **2.1 Classification of the substance or mixture**

This product does not meet the criteria for classification as hazardous as defined in the Regulation EC 1272/2008 and in Directive 67/548/EEC.

Depending on the type of handling and use (e.g. grinding, drying), airborne respirable crystalline silica may be generated. 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.

This product should be handled with care to avoid dust generation.

Regulation EC 1272/2008 : No classification

Classification EU (67/548/EEC) : No classification

This product contains less than 1% respirable cristobalite

### **2.2 Label elements**

None

### **2.3 Other hazards**

This product is an inorganic substance and does not meet the criteria for PBT or vPvB in accordance with Annex XIII of REACH.

## **SECTION 3 : COMPOSITION/INFORMATION ON INGREDIENTS**

Main constituent :	Cristobalite sand
Amount :	Approx 99%
N° CAS	14464-46-1
EINECS	238 455 4
Impurities	This product contains less than 1% cristobalite (respirable), which is classified as STOT RE1.

#### **SECTION 4 : FIRST AID MEASURES**

Eye contact :	Rinse with copious quantities of water and seek medical attention if irritation persists.
Inhalation :	Movement of the exposed individual from the area to fresh air is recommended.
Ingestion :	No first-aid measure required.
Skin contact :	No first-aid measure required.
Most important symptoms and effects, both acute and delayed :	No acute and delayed symptoms and effect are observed
Indication of any immediate medical attention and special treatment needed	No specific actions are required.

#### **SECTION 5 : FIREFIGHTING MEASURES**

No specific extinguishing media is needed.  
Non combustible. No hazardous thermal decomposition.  
No specific fire-fighting protection is required.

#### **SECTION 6 : ACCIDENTAL RELEASE MEASURES**

Personal precautions :	Avoid airborne dust generation, wear personal protective equipment in compliance with national legislation.
Environmental precautions :	No special requirements.
Methods for containment and cleaning up :	Avoid dry sweeping and use water spraying or vacuum cleaning systems to prevent airborne dust generation. Wear personal protective equipment in compliance with national legislation.

#### **SECTION 7 : HANDLING AND STORAGE**

##### **7.1. Precautions for safe 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. Handle packaged products carefully to prevent accidental bursting. If you require advice on safe handling techniques, please contact your supplier or check the Good Practice Guide referred to in section 16.

Do not to eat, drink and smoke in work areas; wash hands after use; remove contaminated clothing and protective equipment before entering eating areas.

## 7.2. Conditions for safe storage, including any incompatibilities

### Technical measures/Precautions

Minimise airborne dust generation and prevent wind dispersal during loading and unloading. Keep containers closed and store packaged products so as to prevent accidental bursting.

## 7.3. Specific end use(s)

If you require advice on specific uses, please contact your supplier or check the Good Practice Guide referred to in section 16.

## **SECTION 8 : EXPOSURE CONTROLS/PERSONAL PROTECTION**

### **8.1 Control parameters**

Follow workplace regulatory exposure limits for all types of airborne dust (e.g. total dust, respirable dust, respirable crystalline silica dust).

The OEL (Occupational Exposure Limit) for respirable crystalline silica dust is 0.05 mg/m<sup>3</sup> in FRANCE, measured as an 8 hour TWA (Time Weighted Average). For the equivalent limits in other countries, please consult a competent occupational hygienist or the local regulatory authority or the annex 1.

### **8.2 Exposure controls**

#### **8.2.1. Appropriate engineering controls**

Minimise airborne dust generation. Use process enclosures, local exhaust ventilation or other engineering controls to keep airborne levels below specified exposure limits. If user operations generate dust, fumes or mist, use ventilation to keep exposure to airborne particles below the exposure limit. Apply organisational measures, e.g. by isolating personnel from dusty areas. Remove and wash soiled clothing.

#### **8.2.2. Individual protection measures, such as personal protective equipment**

Respiratory protection :

In case of prolonged exposure to airborne dust concentrations, wear a respiratory protective equipment that complies with the requirements of European or national legislation.

Hand protection :	Appropriate protection (e.g. gloves, barrier cream) is recommended for workers who suffer from dermatitis or sensitive skin. Wash hands at the end of each work session.
Eye/face protection :	Wear safety glasses with side-shields in circumstances where there is a risk of penetrative eye injuries.
Skin protection :	No specific requirement. For hands, see below. Appropriate protection (e.g. protective clothing, barrier cream) is recommended for workers who suffer from dermatitis or sensitive skin.

### 8.2.3. Environmental exposure controls

Avoid wind dispersal.

## **SECTION 9 : PHYSICAL AND CHEMICAL PROPERTIES**

### 9.1 Information on basic physical and chemical properties

Appearance :	solid, granular, white, angular
Odour :	Odourless
SiO <sub>2</sub> :	Approx. 99 %
PH :	9 to 9.5
Melting point :	1718°C
Relative density :	2,35
Solubility in water :	Negligible
Solubility in hydrofluoric acid :	Yes

### 9.2 Other informations

No other information

## **SECTION 10 : STABILITY AND REACTIVITY**

Inert, not reactive.  
Chemically stable.  
No hazardous reactions.  
No particular incompatibility.

## **SECTION 11 : TOXICOLOGICAL INFORMATION**

Acute toxicity	Based on available data, the classification criteria are not met.
Skin corrosion/irritation	Based on available data, the classification criteria are not met.
Serious eye damage/irritation	Based on available data, the classification criteria are not met.
Respiratory or skin sensitisation	Based on available data, the classification criteria are not met.
Germ cell mutagenicity	Based on available data, the classification criteria are not met.
Carcinogenicity	Based on available data, the classification criteria are not met.
Reproductive toxicity	Based on available data, the classification criteria are not met.
STOT-single exposure	Based on available data, the classification criteria are not met.
STOT-repeated exposure	Based on available data, the classification criteria are not met.
Aspiration hazard	Based on available data, the classification criteria are not met..

## **SECTION 12 : ECOLOGICAL INFORMATION**

Toxicity	Not relevant.
Persistence and degradability	Not relevant.
Bioaccumulative potential	Not relevant
Mobility in soil	Not relevant
Results of PBT and vPvB assessment	Not relevant
Other adverse effects	No specific adverse effects known.

## **SECTION 13 : DISPOSAL CONSIDERATIONS**

### Waste from residues/unused products

Where possible, recycling is preferable to disposal. Can be disposed of in compliance with local regulations.

### Packaging

Dust formation from residues in packaging should be avoided and suitable worker protection assured.

Store used packaging in enclosed receptacles.

Recycling and disposal of packaging should be carried out in compliance with local regulations.

The re-use of packaging is not recommended. Recycling and disposal of packaging should be carried out by an authorised waste management company.

## **SECTION 14 : TRANSPORT INFORMATION**

UN number	Not relevant.
UN proper shipping name	Not relevant
Transport hazard class(es)	ADR: Not classified IMDG: Not classified ICAO/IATA: Not classified RID: Not classified
Packing group	Not relevant
Environmental hazards	Not relevant
Special precautions for user	No special precautions.
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not relevant

## **SECTION 15 : REGULATORY INFORMATION**

Follow workplace regulatory exposure limits  
Exempted from REACH Registration in accordance with Annex V.7.

## **SECTION 16 : OTHER INFORMATION**

### **Third party materials**

Insofar as materials not manufactured or supplied by SILMER are used in conjunction with, or instead of SILMER materials, it is the responsibility of the customer himself to obtain, from the manufacturer or supplier, all technical data and other properties relating to these and other materials and to obtain all necessary information relating to them. No liability can be accepted in respect of the use of SILMER's GRANUSIL in conjunction with materials from another supplier.

### **Liability**

Such information is to the best of [company name's] knowledge and believed accurate and reliable as of the date indicated. However, no representation, warranty or guarantee is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability and completeness of such information for his own particular use..

## **Training**

Workers must be informed of the presence of crystalline silica and trained in the proper use and handling of this product as required under applicable regulations.

## **Social dialogue on respirable crystalline silica**

A multi-sectoral social dialogue agreement on Workers Health Protection through the Good Handling and Use of Crystalline Silica and Products Containing it was signed on 25 April 2006. This autonomous agreement, which receives the European Commission's financial support, is based on a Good Practices Guide. The requirements of the Agreement came into force on 25 October 2006. The Agreement was published in the Official Journal of the European Union (2006/C 279/02). The text of the Agreement and its annexes, including the Good Practices Guide, are available from <http://www.nepsi.eu> and provide useful information and guidance for the handling of products containing respirable crystalline silica. Literature references are available on request from EUROSIL, the European Association of Industrial Silica Producers.

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.

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).

So there is a body of evidence supporting the fact that increased cancer risk would be limited to people already suffering from silicosis. Worker protection against silicosis should be assured by respecting the existing regulatory occupational exposure limits and implementing additional risk management measures where required (see section 16 below).



## Annex 1

### Occupational Exposure Limits in mg/m<sup>3</sup> – Respirable dust In EU 27<sup>1</sup> + Norway & Switzerland

Country/Authority (See caption p.2)	Inert dust	Quartz (q)	Cristobalite (c)	Tridymite (t)
Austria / I	6	0,15	0,15	0,15
Belgium / II	3	0,1	0,05	0,05
Bulgaria / III	4	0,07	0,07	0,07
Czech Republic/ IV		0,1	0,1	0,1
Denmark / V	5	0,1	0,05	0,05
Estonia		0,1	0,05	0,05
Finland / VI		0.2	0.1	0.1
France / VII		5 or 25k/Q <sup>2</sup>		
France / VIII	5	0,1	0,05	0,05
Germany/IX	3	/ <sup>3</sup>	0,15	0,15
Greece/X	5	0,1	0,05	0,05
Hungary		0,15	0,1	0,15
Ireland/ XI	4	0,05	0,05	0,05
Italy/ XII	3	0,05	0,05	0,05
Lithuania/ XIII	10	0,1	0,05	0,05
Luxembourg/ XIV	6	0,15	0,15	0,15
Malta / XV <sup>4</sup>	/	/	/	/
Netherlands/ XVI	5	0,075	0,075	0,075
Norway/XVII	5	0,1	0,05	0,05
Poland		0,3	0,3	0,3
Portugal/XVIII	5	0,05	0,05	0,05
Romania/XIX	10	0,1	0,05	0,05
Slovakia		0,1	0,1	0,1
Slovenia		0,15	0,15	0,15
Spain/ XX	3	0,1	0,05	0,05
Sweden/XXI	5	0,1	0,05	0,05
Switzerland/XXII	6	0,15	0,15	0,15
United Kingdom/XXIII	4	0,1	0,1	0,1

<sup>1</sup> Missing information for Cyprus and Latvia. – To be completed.

<sup>2</sup> Q : quartz percentage – K=1

<sup>3</sup> Germany has no more OEL for quartz. Employers are obliged to minimize exposure as much as possible, and to follow ce  
ain protective measures.

<sup>4</sup> When needed, Maltese authorities refer to values from the UK for OELVs which do not exist in the Maltese legislation.

## Caption

Country		Adopted by/Law denomination	OEL Name (if specific)
Austria	I	Bundesministerium für Arbeit und Soziales	Maximale ArbeitsplatzKonzentration (MAK)
Belgium	II	Ministère de l'Emploi et du Travail	
Bulgaria	III	Ministry of Labour and Social Policy and Ministry of Health. Ordinance n°13 of 30/12/2003	Limit Values
Czech Republic	IV	Governmental Directive n°441/2004	
Denmark	V	Direktoratet for Arbejdstilsynet	Threshold Limit Value
Finland	VI	National Board of Labour Protection	Occupational Exposure Standard
France	VII	Ministère de l'Industrie (RGIE)	Empoussiérage de référence
	VIII	Ministère du Travail	Valeur limite de Moyenne d'Exposition
Germany	IX	Bundesministerium für Arbeit	Maximale ArbeitsplatzKonzentration (MAK)
Greece	X	Legislation for mining activities	
Ireland	XI	2002 Code of Practice for the Safety, Health & Welfare at Work (CoP)	
Italy	XII	Associazione Italiana Degli Igienisti Industriali	Threshold Limit Values (based on ACGIH TLVs)
Lithuania	XIII	Dėl Lietuvos higienos normos HN 23:2001	Ilgalaikio poveikio ribinė vertė (IPRV)
Luxembourg	XIV	Bundesministerium für Arbeit	Maximale ArbeitsplatzKonzentration (MAK)
Malta	XV	OHSa – LN120 of 2003, <a href="http://www.ohsa.org.mt">www.ohsa.org.mt</a>	OELVs
Netherlands	XVI	Ministerie van Sociale Zaken en Werkgelegenheid	Maximaal Aanvarde Concentratie (MAC)
Norway	XVII	Direktoratet for Arbejdstilsynet	Administrative Normer (8hTWA) for Forurensing i Arbeidsmiljøet
Portugal	XVIII	Instituto Portuges da Qualidade, Hygiene & Safety at Workplace NP1796:2004	Threshold Limit Value
Romania	XIX	Government Decision n° 355/2007 regarding workers' health surveillance. Government Decision n° 1093/2006 regarding carcinogenic agents (in Annex 3: Quartz, Cristobalite, Tridymite).	OEL
Spain	XX	Instrucciones de Técnicas Complementarias (ITC) Orden ITC/2585/2007	Valores Limites
Sweden	XXI	National Board of Occupational Safety and Health	Yrkeshygieniska Gränsvärden
Switzerland	XXII		Valeur limite de Moyenne d'Exposition
United Kingdom	XXIII	Health & Safety Executive	Workplace Exposure Limits

Source: IMA-Europe. Date: October 2007, updated version available at <http://www.ima-eu.org/en/publication.htm>