

SILESTONE

Material Safety Data Sheet



THE ORIGINAL

01 IDENTIFICATION OF THE MIXTURE AND OF THE COMPANY/UNDERTAKING

Name of Product: Silestone®

Use of Product: Quartz surfacing designed for use indoors, particularly kitchen and bathroom worktops, flooring, cladding and other similar uses.

Avoided uses: Do not manufacture the product by dry processes.

Name of the company: Cosentino, S.A. Ctra. A-334. Km 59 Cantoria (Almería) España.
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Phone number in case of emergency: Toxicology Helpline: +34 91 562 04 20

02 HAZARDS IDENTIFICATION

There is no provision for any risk associated with the finished Silestone® product in the CLP (EC) regulation nº. 1272/2008. However, during the manufacturing and installation of the product, it is necessary to consider the following information. Please, read carefully. The dust derived from the manufacturing processes, contain respirable crystalline silica. (SiO₂). Contents of crystalline silica 70%-90%.



HAZARD:
H372 Causes damage to lungs through prolonged or repeated exposure (inhalation).

GHS08
STOT RE1

Classification according to directive 1999/45/EC



R20 Harmful by inhalation
R48 Danger of serious damage to health by prolonged exposure.

Xn



PREVENTION:

P260 Do not breathe dust generated in the cutting, grinding and polishing processes.

P264 Wash face and hands thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P284 Wear respiratory protection for particles (P3).

FIRST AID MEASURES

P314 Get medical advice/attention if you feel unwell.

P501 Dispose of remains in accordance with local regulation.

S22 Do not breath the dust.

S38 Use personal protective equipment P3.

03 COMPOSITION/INFORMATION ON INGREDIENTS

General description of the components: The material is made up of inorganic mineral deposits (85-95%), including, but not limited to, silica sands, quartz, crystobalite, glass and others, polyester (5-15%), pigments and additives (<5%). Contents of crystalline silica 70%-90%.

The end product is certified by the Greenguard Environment Institute fulfilling the quality regulations for the indoor use of volatile organic compounds (Certificación N° HP2Ss93513-1). The product holds other certifications confirming its commitment to the environment and health and safety such as the ISO 14001 and the NSF.



04 FIRST AID MEASURES



Contact with eyes: Keep your eyes open and wash thoroughly with lots of water.

Contact with skin: Wash with soap and water.

Inhalation: Bring the affected employee to a well-ventilated place. Additional ventilation may be required if the employee has suffered a serious reaction. Properly ventilate the work area. Seek medical advice if you feel unwell.

05 FIREFIGHTING MEASURES

Fire-resistant	Category: B, s1, d0 / Bfl, s1
Suitable extinguishing agents	Any suitable agent for surrounding fires.
Personal Protection Equipment	Depending on the surrounding fire.

06 ACCIDENTAL RELEASE MEASURES

The product does not represent risk of spillage.

07 HANDLING AND STORAGE

Manual handling.

Special measures are not required in the handling of Silestone® but we recommend the following precautions:

Individual precautions. Wear safety shoes and gloves during the handling and storage operations of Silestone®.

Environmental protection precautions. We recommend the use of water-cooled tools to prevent the creation of dust.

Storage.

There are no specific conditions for safe storage, except that it should be properly stored in a closed and covered place. Avoid strong impacts that may cause the material to break.

08 EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure limit values.

There is no provision for any risk associated with the finished Silestone® product in the CLP (EC) regulation nº. 1272/2008. Nevertheless, in cutting, grinding, polishing etc processes dust containing silica (SiO₂) may be generated.

Check the limits applicable under the regulations of each country.

Occupational Exposure Limits in mg/m³ 8 hours TWA - Respirable dust - in EU 271 + Norway & Switzerland

Country/Authority	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
Cyprus / IV	/	10k/Q ²	/	/
Czech Republic / V		0,1	0,1	0,1
Denmark / VI	5	0,1	0,05	0,05
Estonia		0,1	0,05	0,05
Finland / VII		0,2	0,1	0,1
France / VIII		5 or 25 k/Q		
France / IX	5	0,1	0,05	0,05
Germany / X	3	/ ³	/	/
Greece / XI	5	0,1	0,05	0,05
Hungary		0,15	0,1	0,15
Ireland / XII	4	0,05	0,05	0,05
Italy / XIII	3	0,025	0,025	0,025
Lithuania / XIV	10	0,1	0,05	0,05
Luxembourg / XV	6	0,15	0,15	0,15
Malta / XVI ⁴	/	/	/	/
Netherlands / XVII	5	0,075	0,075	0,075
Norway / XVIII	5	0,1	0,05	0,05
Poland		0,3	0,3	0,3
Portugal / XIX	5	0,025	0,025	0,025
Romania / XX	10	0,1	0,05	0,05
Slovakia		0,1	0,1	0,1
Slovenia		0,15	0,15	0,15
Spain / XXI	3	0,1	0,05	0,05
Sweden / XXII	5	0,1	0,05	0,05
Switzerland / XXIII	6	0,15	0,15	0,15
United Kingdom / XXIV	4	0,1	0,1	0,1

¹ Missing information for Latvia. - To be completed.

² Q : quartz percentage - K=1

³ Germany has no more OEL for quartz, cristobalite, tridymite. Employers are obliged to minimize exposure as much as possible, and to follow certain protective measures.

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

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
Cyprus	IV	Department of Labour Inspection. Control of factory atmosphere and dangerous substances in factories, Regulations of 1981.	
Czech Republic	V	Governmental Directive n°441/2004.	
Denmark	VI	Direktoratet for Arbejdstilsynet.	Threshold Limit Value
Finland	VII	National Board of Labour Protection.	Occupational Exposure Standard
France	VIII	Ministère de l'Industrie (RGIE).	Empoussiérage de référence
	IX	Ministère du Travail.	Valeur limite de Moyenne d'Exposition
Germany	X	Bundesministerium für Arbeit.	Maximale ArbeitsplatzKonzentration (MAK)
Greece	XI	Legislation for mining activities.	
Ireland	XII	2002 Code of Practice for the Safety, Health & Welfare at Work (CoP).	
Italy	XIII	Associazione Italiana Degli Igienisti Industriali.	Threshold Limit Values (based on ACGIH TLVs)
Lithuania	XIV	Del Lietuvos higienos normos HN 23:2001.	Ilgalaikio poveikio ribine verte (IPRV)
Luxembourg	XV	Bundesministerium für Arbeit.	Maximale ArbeitsplatzKonzentration (MAK)
Malta	XVI	OHSa –LN120 of 2003, www.ohsa.org.mt	OELVs
Netherlands	XVII	Ministerie van Sociale Zaken en Werkgelegenheid.	Publieke grenswaarden http://www.ser.nl/en/oel_database.aspx
Norway	XVIII	Direktoratet for Arbejdstilsynet.	Administrative Normer (8hTWA) for Forurensing I Arbeidsmiljøet
Portugal	XIX	Instituto Portuges da Qualidade, Hygiene & Safety at Workplace NP1796:2004.	Valores Limite de Exposição (VLE)
Romania	XX	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	XXI	Instrucciones de Técnicas Complementarias (ITC) Orden ITC/2585/2007	Valores Limites
Sweden	XXII	National Board of Occupational Safety and Health	Yrkeshygieniska Gränsvärden
Switzerland	XXIII		Valeur limite de Moyenne d'Exposition
United Kingdom	XXIV	Health & Safety Executive	Workplace Exposure Limits

Source: IMA-Europe. Date: May 2010, updated version available at <http://www.ima-europe.eu/otherPublications.html>

Exposure Controls.

Manufacturing and installation.

The manufacturer recommends methods that involve the use of water in the manufacturing of this product. Dust derived from the manufacturing processes could contain silica (SiO₂).

Long term exposure to dust derived from the cutting and manufacturing processes without the use of suitable protection may cause serious diseases including pneumoconiosis such as silicosis, as well the deterioration of other lungs diseases such as bronchitis, emphysema, etc.

Exposure to dust may be monitored and controlled with suitable control measures such as:

- Machinery and tools involving the use of water.
- Natural and/or mechanical ventilation systems that ensure the renewal of air in the work place.

Country		Adopted by/Law denomination	OEL Name (if specific)
Austria	I	Bundesministerium für Arbeit und Soziales.	Maximale ArbeitsplatzKonzentration (MAK)
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Exposure Controls.

Manufacturing and installation.

The manufacturer recommends methods that involve the use of water in the manufacturing of this product. Dust derived from the manufacturing processes could contain silica (SiO₂).

Long term exposure to dust derived from the cutting and manufacturing processes without the use of suitable protection may cause serious diseases including pneumoconiosis such as silicosis, as well the deterioration of other lungs diseases such as bronchitis, emphysema, etc.

Exposure to dust may be monitored and controlled with suitable control measures such as:

- Machinery and tools involving the use of water.
- Natural and/or mechanical ventilation systems that ensure the renewal of air in the work place.

- **Cleaning and maintenance.** Use of vacuum and/or water cleaning systems, avoid sweeping and the use of compressed air, which creates dust. Preventive maintenance programmes of the installations to ensure the correct conditions of order, cleaning and operation of work equipment.
- **Respiratory protection for P3 type particulates** according to EN 143:2001 and its revisions EN 143/AC 2002, EN 143/AC 2005, including working with water as a dust-reducing agent during the preparation of Silestone®.
- **Hand Protection.** We recommend the use of gloves to avoid the risk of cutting when handling pieces.
- **Eye protection.** We recommend the use of eye protection in accordance with regulation EN166:2001.
- **Skin protection.** Skin protection is not necessary but we recommend that work clothes are worn to avoid the contact of dust with skin. Wash hands and face with soap and water to remove dust before breaks and at end of the shift.
- **Work clothes:** do not clean up using compressed air, use vacuum cleaning methods.

According to relevant laws and regulations, any product that does not meet quality specifications or is rejected can be disposed of in inert waste landfills.

09 PHYSICAL AND CHEMICAL PROPERTIES

Aspect: Solid, according to commercial range.

Colour: commercial range.

Odour: Odourless.

pH: N/A.

Miscibility (in water): N/A.

Water absorption (EN-14617-1): (0.04-0.20) %.

Density (EN-14617-1): 2250-2450 kg/m³

Compression resistance (EN-14617-15): 112-248 MPa.

Bending stress (EN-14617-2): 29-70 MPa.

Coefficient of thermal expansion (EN-14617-11): 7-8-10-6 °C-1

Autoignition temperature: N/A.

Fire point: N/A.

10 STABILITY AND REACTIVITY

Conditions to avoid:

Avoid contact with surfaces at temperatures above 150 ° C.

Avoid strong impacts that may cause the material to break. Avoid use in outdoors areas.

Decomposition products: Unknown.

11 TOXICOLOGICAL INFORMATION

Toxicological Helpline (Spain): +34 91 562 04 20

Dust derived from the manufacturing processes could contain silica (SiO₂).

Long term exposure and/or mass fraction of respirable crystalline silica may cause severe damage to health including pulmonary fibrosis and pneumoconiosis such as silicosis, as well the deterioration of other lungs diseases such as bronchitis, emphysema, etc. The main symptom of silicosis is the reduced capacity of the lung. Persons affected by silicosis have a higher risk of suffering from lung cancer.

12 ECOLOGICAL INFORMATION

Silestone® does not contain ecotoxins but due to its physical-chemical nature it inhibits the growth of micro-organisms on its surface.

13 DISPOSAL CONSIDERATIONS

In accordance with European Directives 91/156/EEC and 199/31/CEE and the law 10/98, April 21 and RD 1481/2001, 27 December, a product that does not meet quality specifications or is rejected can be disposed off at inert waste landfills. The Silestone® packaging will be disposed off according to country regulations. In general, they will be deposited in plastic or paper containers depending on whether or not it can be recycled.

14 TRANSPORT INFORMATION

The product is not classified as dangerous according to air, land and sea transport regulations.

UN Number	unassigned	Sea transport	
Packaging group	none	IMDG/IMO	no restricted
Road and rail transport		Air transport	
ADR/RID		ICAO/IATA	no restricted
TPC/TPF	no restricted		

15 REGULATORY INFORMATION

This Safety Data Sheet (MSDS) has been prepared according to CLP Regulation, (EC) No 1272/2008. Labelled according to European EEC directives.

16 OTHER INFORMATION

Check with Cosentino, SA before using or supplying this product for other applications, different to those previously stated.

The information in this document is to our knowledge up-to-date and accurate. However, we cannot guarantee the recommendations or suggestions herein, as the product's conditions of use are beyond our control. In addition, the contents of this safety data sheet must not be interpreted as a recommendation to use any product in violation of the laws, safety practices or patents in force on any material or its use.

It is the responsibility of the recipient of our product to check the corresponding rules and regulations. Under no circumstances does the data contained in this Safety Data Sheet constitute a guarantee of specific properties or create any contractual relationship.

This Safety Data Sheet (MSDS) is according to the CLP Regulation, (EC) No 1272/2008.

For further information follow the instructions in the Guide to Good Practice for Preparation published by the manufacturer. Information available www.silestone.com

You can get further information in <http://www.nepsi.eu/> and the Guide to Good Practice for the Agreement on Workers' Health Protection Through the Good Handling and Use of Crystalline Silica and Products Containing it, published by NEPSI.