

**1.- Identification of the product and the company.**

**1.1.- Name of the Product.**

**Silestone®**

**1.2.- Use of the product.**

Quartz surface for indoor use, mainly on kitchen and bathroom worktops, flooring, levelling, as well as similar uses.

**1.3.- Company name.**

Cosentino, S.A.  
Ctra. A-334. Km 59 Cantoria (Almería).  
Telephone no.: +34 950 44 41 75 Fax: +34 950 44 42 26  
[www.cosentinogroup.net](http://www.cosentinogroup.net)

**1.4.- Emergency telephone number.**

Tlfn: 0870 600 6266 or ( +44 870 600 6266 )

**2.- Composition/Information on the components.**

**2.1.- General description of the components.**

General Composition. Table 1

SUBSTANCE	COMPOSITION (%)
Polymerised orthophthalic polyester resin.	5 - 25
Pigments.	< 5
Crushed Silica, Quartz, Glass, Mirror and Granite.	5 - 95

Additive composition. Table 2

CAS no.	EINECS no.
83711-44-8	280-540-3
614-45-9	210-382-2
2530-85-0	219-785-8



## SAFETY DATA SHEET

# Silestone®

Revision Date:  
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The Silestone® product has no free substances that present a health risk according to the Dangerous Substances Regulation R.D. [Royal Decree] 255/2003 and according to the European Directives 67/548/EEC, 199/45/EEC and amendments 93/112/EEC, 2001/58/EEC and 2001/60/EEC.

The finished product does not contain any of the substances described in table 2, since once the production process has been completed, the substances are included and immobilised in the polyester, forming part of its three-dimensional structure. Thus, the Silestone® product is not classified as a dangerous substance and nor does it constitute a health risk according to the Dangerous Substances Regulation R.D. [Royal Decree] 255/2003 and according to the European Directives 67/548/EEC, 199/45/EEC and amendments 93/112/EEC, 2001/58/EEC and 2001/60/EEC, according to which this Material Safety Data Sheet (MSDS) was drafted. Moreover, the finished product is certified by the Greenguard Environment Institute as a product that complies with indoor air quality standards with regard to volatile organic compounds (Certification No. HP2Ss93513-1).

The product also has other certifications that endorse its environmental and health commitment, such as the ISO 14001 and NSF.

### 3.- Identification of the risks.

The Silestone® product does not present any type of hazard for human health and the environment according to the Dangerous Substances Regulation R.D. [Royal Decree] 255/2003 and according to the European Directives 67/548/EEC, 199/45/EEC and amendments 93/112/EEC, 2001/58/EEC and 2001/60/EEC.

The powder generated in the manufacturing processes **contains silica (SiO<sub>2</sub>)**.

#### R PHRASES:



**Xn**

R20: Harmful by prolonged inhalation.

#### S PHRASES:



S22: Do not breathe the dust from the cutting process.  
S38: Wear suitable respiratory equipment, type FFP3.

Like any natural stone product containing other natural stone products such as quartz, marble or granite, the manufacturing (dry-cutting, grinding or other treatments) and installation of Silestone® may generate powder that may cause irritation of the eyes, nose and airways. The high concentration of silica present in Silestone® requires particularly diligent use by the professional.

**Silestone®**

Prolonged and/or massive inhalation of crystalline silica can cause pulmonary fibrosis and pneumoconiosis and silicosis, as well as a worsening of other pulmonary diseases (bronchitis, emphysema, etc.). The main symptom of silicosis is the loss of pulmonary capacity. People with silicosis have a greater risk of getting lung cancer.

Exposure to the powder should be monitored and controlled with suitable measures of protection such as the installation of ventilation systems, dust/powder pick-up systems, vacuum cleaning systems and the use of type FFP3 individual protection.

**THE MANUFACTURER RECOMMENDS THAT THE PRODUCT BE MADE AND INSTALLED USING WET PRODUCTION METHODS.**

For further information follow the instructions issued in the **Good Practice Guidelines for the Manufacture of Silestone® and ECO by Cosentino®** published by the manufacturer.  
Information available [www.silestone.com](http://www.silestone.com).

**4.- First aid.**

No immediate medical assistance is required. In the event of unwanted contact with the powder or with any residue produced during the manufacturing process, the following recommendations should be observed.

**Contact with the eyes:** Keep the eyelids open and wash thoroughly with plenty of water.


**Contact with the skin:** Wash with soap and water.

**Contact by inhalation:** Take the affected person to a well-ventilated place. Apply assisted ventilation if the injured person has a serious reaction. Ventilate the work area properly.

**Contact by swallowing:** See a doctor.

**5.- Fire-fighting measures.**

Special fire risks:	M3 code
Resistance to fire	Category B s1 (Fumes) d0 (Dripping)
Suitable extinction agents	Any suitable agent against the type of fire in question.
Personal protection equipment	According to the fire in question.

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## 6.- Measures in case of accidental spillage.

Silestone® may give rise to accidental material detachment during cutting and polishing and other processes involved in its handling.

The following measures are recommended to reduce the possibility of accidental exposure:

**Personal precautions.** Safety footwear, gloves, eye and respiratory protection are recommended for cleaning and the removal of waste.

**Precautions for the protection of the environment.** The use of water-cooled tools is specifically recommended, and any dry cutting, grinding, manufacturing or any other treatment of Silestone® should be carried out in a well-ventilated place. This will prevent the formation of dusty or powdery environments.

**Method of disposal.** In accordance with the corresponding laws and regulations, any product that does not meet quality specifications or is rejected can be deposited in landfills for inert waste.

## 7.- Handling and storage.

### 7.1.- Handling.

The handling of Silestone® requires no special measures, although the following precautions are recommended.

**Personal precautions.** Use safety footwear and mechanical protective gloves during Silestone® handling and storage operations.

**Precautions for the protection of the environment.** The use of water-cooled tools is specifically recommended, and any dry-cutting, grinding, manufacturing or any other treatment of Silestone® should be carried out in a well-ventilated place to prevent the formation of dusty or powdery environments.

### 7.2.- Storage.

No specific conditions are required for safe storage, only that the premises are properly closed and covered. Avoid strong impacts that might lead to breakage of the material.

## 8.- Exposure and personal protection controls.

### 8.1.- Exposure limit values.

The exposure and personal protection elements are only necessary for the treatment and manufacture of Silestone® (cutting, polishing, etc.), due to the powder in suspension that may be generated in these processes, and not from the Silestone® as a product.



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In accordance with the foregoing, and pursuant to the Directive 2000/39/EC, as well as R.D. [Royal Decree] 374/2001 which refers to the values published by the National Institute of Health and hygiene in the workplace (INSHT), there exist the following:

Daily Exposure Limit Values (DELV)	
Respirable powder fraction	3 mg/m <sup>3</sup>
Quartz (free silica)	0.1 mg/m <sup>3</sup>
Cristobalite	0.05 mg/m <sup>3</sup>

Note: Exposure limit values for Spain. Consult the current limits according to the regulations in each country.

### 8.2.- Exposure control.

**Ventilation systems and work equipment.** Forced ventilation systems and Filter of Air. Wet-system machinery and work tools.

**Cleaning and maintenance.** Use of cleaning systems by aspiration, avoiding sweep or the use of compressed air, which may generate a powdery or dusty environment. Preventive maintenance programmes for the installations to correct possible wear and powder/dust leaks into the working environment.

**Respiratory protection.** Personal respiratory protection for powder and FFP3-type particles according to the EN 143:2001 regulations and the revisions EN 143/AC 2002, EN 143/AC 2005, including working with water as a powder-reducing agent during the preparation of Silestone<sup>®</sup>.

**Hand protection.** The use of protective gloves is not necessary, although their use is recommended to avoid cutting caused by parts during handling. Wash your hands with soap and water to eliminate powder from manufacturing before breaks and at the end of shifts.

**Eye protection.** The use of EN166:2001-compliant safety goggles is recommended.

**Skin protection.** The use of skin protection is not necessary.

In accordance with the corresponding laws and regulations, any product that does not meet quality specifications or is rejected can be deposited in landfills for inert waste.

**9.- Physical and chemical properties.**

**Appearance:** Solid, according to commercial range.

**Colour:** Commercial range.

**Odour:** Odourless.

**pH:** Not applicable.

**Miscibility (in water):** Not applicable.

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

**Density (EN-14617-1):** 2250-2450 kg/m<sup>3</sup>

**Compression strength (EN-14617-15):** 112-248 MPa

**Resistance to bending (EN-14617-2):** 29-70 MPa

**Thermal expansion coefficient (EN-14617-11):**  $7-8 \cdot 10^{-6} \text{ } ^\circ\text{C}^{-1}$

**Ignition temperature:** Not applicable.

**Flash point:** Not applicable.

**10.- Stability and reactivity.****Conditions to avoid.**

Avoid contact with surfaces at temperatures above 150 °C.

Avoid strong impacts that might lead to breakage of the material.

Avoid use outdoors.

**Materials to be avoided.**

Avoid prolonged contact with products containing acetone and commercial strippers. They affect the structure and the bonds of the polyester resin. Contact with solvents of the dichloromethane family should particularly be avoided.

Avoid contact with strongly basic products ( $\text{pH} > 7$ ), such as caustic soda (NaOH) or potash (KOH). This gives rise to a series of substitution reactions in the polymer's molecule and the breakage of bonds that negatively affect the structure of the polyester resin.

Hydrofluoric Acid (HF). The reaction with hydrofluoric acid causes the decomposition of SiO<sub>2</sub> (of silica and quartz) in silicon tetrafluoride (which is a corrosive gas) and water, thus causing the surface of the Silestone<sup>®</sup> material to deteriorate.

**Decomposition products.**

None known.

**11.- Toxicological information.**

The powder generated in the manufacturing processes contains silica (SiO<sub>2</sub>).

Prolonged and/or massive inhalation of crystalline silica can cause pulmonary fibrosis and pneumoconiosis and silicosis, as well as a worsening of other pulmonary diseases (bronchitis, emphysema, etc.). The main symptom of silicosis is the loss of pulmonary capacity. People with silicosis have a greater risk of getting lung cancer.

**12.- Ecological Information.**

Silestone® has no ecotoxicity, but due to its physicochemical nature it inhibits the growth of microorganisms on its surface.

**13.- Disposal considerations.**

In accordance with the European Directive 91/156/EEC and 199/31/EEC, as well as with Law 10/98, of 21 April and its R.D. [Royal Decree] 1481/2001, of 27 of December, any product that does not meet quality specifications or is rejected can be deposited in landfills for inert waste.

The packaging of the Silestone® product should be disposed of in accordance with the national legislation. In general, it should be deposited in plastic or paper containers depending on whether it can be recycled.

**14.- Information on transport.**


Non-dangerous product according to the criteria governing overland, sea and air transport.

UN Number	Not assigned	Sea transport	
Packing group	None	IMDG/IMO	Not restricted
Road and rail transport		Air transport	
ADR/RID		ICAO/IATA	Not restricted
TPC/TPF	Not restricted		

**15.- Obligatory information.**

The Silestone® product is not classified as a dangerous substance or does not present a health risk according to the Dangerous Substances Regulation R.D. [Royal Decree] 255/2003 and according to the European Directives 67/548/EEC, 199/45/EEC and amendments 93/112/EEC, 2001/58/EEC and 2001/60/EEC, according to which this Material Safety Data Sheet (MSDS) was drafted.

Labelling according to the European EEC directives.

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## 16.- Other information.

Check with Cosentino, S.A. before using or supplying the product for types of applications other than those stated above.

The information contained in this document is, according to the best of our knowledge, true and exact. However, any of the recommendations or suggestions made here are done so outside our guarantee, since the conditions of use of the product are beyond our control. Moreover, none of the contents of this Material Safety Data Sheet may be construed as a recommendation for using any product breaking the law, safety practices or patents in force on any material and its use.

The receiver of our product must observe, on their own responsibility, the corresponding regulations and legislation. None of the data contained in this Material Safety Data Sheet constitute a guarantee of specific properties, and nor do they create a contractual relationship.

This Material Safety Data Sheet (MSDS) complies with the Dangerous Substances Regulations R.D. [Royal Decree] 255/2003 and according to the European Directives 67/548/EEC, 199/45/EEC and amendments 93/112/EEC, 2001/58/EEC and 2001/60/EEC.

For further information follow the instructions issued in the **Good Practice Guidelines for the Manufacture of Silestone<sup>®</sup> and ECO by Cosentino<sup>®</sup>** published by the manufacturer.

Information available [www.silestone.com](http://www.silestone.com).

*Further information is available at [http://www.nepsi.eu/](http://www.nepsi.eu) and in the Good Practice Guide on Workers Health Protection through the Good Handling and Use of Crystalline Silica and Products Containing it, published by NEPSI.*