

POLARSTONE®

MATERIALS SAFETY
DATA SHEET (MSDS)

01 Company Information

FOSHAN MONICA QUARTZ STONE CO.,LTD

Fengen Industrial Zone Leping Town Sanshui Distric District Foshan
Guangdong,China

T +86-757-87313887 F +86-757-87313887

For product inquiry: chen@polarstone.cn landy@polarstone.cn

Website: www.polarstoneus.cn

02 Product Information

2.1 Product Description

Quartz slabs, pre-fabricated counter tops, and cut-to-size counter tops.

2.2 Product Use

Surfacing material for interior application.

2.3 Product Composition/Information on Ingredients

Materials	%
Crystalline silica and other natural stone	>89%
Cristobalite	<46%
Polymeric resin	7.5-13%
Additives	0-9%

03 Potential health effects

Polarstone® Surfaces in finished form does not present any health hazard to users.

- Dust and powder generated from fabrication and installation may cause irritation to skin, eyes, nose and airways. Adequate ventilation systems should exist in the fabrication work areas to minimize constant
- Inhalation of flying dust and powder. Fabricators and installers should use vacuum cleaning equipment, dust pick/up systems, and protection masks.
- Massive inhalation of crystalline silica may cause pulmonary diseases such as bronchitis, emphysema, and other pulmonary diseases.
- Important note: we recommend the product to be made, fabricated, and installed using wet production methods.

04 Fire Fighting Measures

Polarstone® is difficultly flammable.

- Extinguishing ways: Water, Dry Chemical, CO2 and Foam or follows the standard of Fire fighting indication;
- Firemen Protection: Standard equipment;
- Exposure: No explosion probability;

05 First Aid Measures

In the event of any unwanted contact with powder and dust, please follow these guidelines:

- Skin: Wash exposed skin with soap and plenty of water. Remove exposed clothing.
- Eyes: Wash hands thoroughly first. Flush eyes immediately with plenty of water for a minimum of 15 minutes.
- Inhalation: Remove person to fresh air. If breathing is difficult, or has stopped, mouth-to-mouth or oxygen as indicated. Call a physician
- Other fire Fighting Procedures: Keep personnel away and upwind of fire, use full face mask if necessary
- Ingestion: Seek medical attention or advice.

06 Handling and Storage

- Handle the product carefully. Secure properly when placing slabs on rack or A-frame. observe all safety handling indication and disposal regulations for the stone industry.
- Avoid breathing dust. Wash hands after work using soap and plenty of water.

6.1 Storage Conditions

- Not to place more than 3.5 tons per wood bundle.
- Not to place more than 20 prefabricated counter tops on rack or A-frame.
- No outdoor storage. No exposure to sun and rain.

6.2 Handling Measures

- Wear appropriate safety glasses with side shields and dust masks when cutting and polishing material.
- Use steel-toed footwear and wear industrial gloves when handling material. Wash hands before eating and drinking. Wash thoroughly after work using soap and water. Good hygiene practices should be followed when handling this material.

07 Preventive measures and Personal protection

7.1 Don't breathe dust generated in Cutting, Sanding, and Polishing

- Use safety goggles, face and neck protection, and dusk masks.
- Use dust extraction equipment.
- Use dust vacuum cleaning equipment.
- Don't eat, drink or smoke when working, wash face and hands thoroughly after handling.

7.2 Slabs and Counter tops Handling

- Recommended to do in an adequately marked area away from frequent foot traffic.
- Recommended to mechanize the handling of heavy or complex pieces.

08 Physical and Chemical Properties

Physical appearance	Multi-colored engineered stone
Odor	Odorless
PH	N/A
Flash point	360°C

09 Technical Specification

Durability and Strength

Mohs Scale of Hardness	5.5-7
Apparent Density	2.3-2.4 gr/cm ³
Water absorption	0%
Thermal shock	Mass loss: 0.03% Flexural strength loss:2.9%
Flammability	Best rating
Coefficient of thermal exp.(°C-1)	1.670x10 ⁻⁵ in/in/deg F
Compressive strength	226.1-232.4 N/mm ²
Flexural strength(Mpa)	45.5-56 Mpa

Physical Resistance

Abrasion resistance(mm3)	20.6mm
Impact resistance(J)	4.89J
Resistance to Fungi and Bacteria	No growth
Wear and Cleanability	Good

Chemical Resistance

Staining Agent	Cleaning Result
CH ₃ COOH(10% V/V)	Removal
Na OH(5% m/m)	Removal
C ₂ H ₅ OH(70% V/V)	Removal
NaOCl(5%)	Removal
Methylene blue(1% m/m)	Removal
NaCl(170G/L)	Removal

10 Stability and Reactivity

- Chemical Stability: Stable at normal temperatures and storage conditions, avoid outdoor, sun and rain;
- Hazardous Decomposition products: Thermal decomposition can release various hydrocarbons, carbon dioxide, carbon monoxide and water. Fumes of metal oxides and mica particles could also be released.
- Incompatibility with other Materials: This product is incompatible with Hydroelectric acid.
- Hazardous Polymerization: Will not occur.

11 Toxicological information

The dust generated in the manufacturing process contains silica.

- Overexposure to airborne crystalline silica can cause silicosis, a chronic and progressively debilitating disease, characterized by the formation of silica-containing scar tissue in the lungs.

- People with silicosis have a greater risk of getting lung cancer. Epidemiology studies show limited evidence of an excess of lung cancer in occupations involving exposures to crystalline silica, such as stone cutters and granite business workers;

12 Waste Disposal considerations

- Waste Disposal Method: Preferred options for disposal, for example, recycling, incineration and landfill;
- Processing, use or contamination of the product may change the waste management options;
- Discard and dispose apply with government and local laws and regulations.

13 Environmental information

Ecotoxicity	No detrimental environmental impact is known
Mobility	Not volatile

14. Other information

The information contained herein is based on the data available to us and is believed to be correct, but doesn't replace the technical specifications.

All information and recommendations in the documents are made in good faith.

But Polarstone makes no warranties, expressed or implied, regarding the accuracy of these data or the results to be obtained from the use thereof.