

SAFETY DATA SHEET

# Safety data sheet

## 1: Identification of the product and the company

Product Name	:	VIVA
Physical Information	:	Agglomerated Stone / Engineered Stone
Recommended Uses	:	VIVA Engineered Stone Surfaces are designed, developed and manufactured for Interior Surfacing uses, particularly for kitchen and bathroom worktops, vanity tops, wall claddings and other similar uses.
Synonyms	:	Engineered Quartz Slabs, Quartz Surfaces

Company	Address	Contact
Pacific Quartz Surfaces LLP	Khasra No 772/183, 773/182, Dudu, N.H.8 Jaipur-Ajmer, opp. National Plaza Restaurant, Rajasthan 303008	info@thevivastone.com

## 2: Composition and information of ingredients

Company	CAS Number	%	Remark
Quartz / Silica Powder	14808-60-7	< 93 %	Used in sizes ranging from 38 microns to 6 mm
Cristobalite	14464-46-1	< 35 %	
Glass & Mirror	N/A	< 15 %	
Unsaturated Polyester resin Mixture		< 14.5 %	Mixture of Polyester Resin and Styrene
Other materials	N/A	< 5 %	
Titanium dioxide	13463-67-7	< 1 %	
Inorganic pigment mixture	N/A	< 1 %	

The percentage specified above is the maximum possible, exact quantity varies in different products.

### 3: Hazard identification

Under normal usage, this product is not expected to create any Harmful / Hazardous effects on health / Environment. However, dust derived from Fabrication Processes contains respirable crystalline silica (SiO<sub>2</sub>). Hence, workers involved in Fabricating Processes, whether at the fabrication workshop or upon installing and removing/demolishing should use Personal Protective equipment for protection from dust.

VIVA Quartz Engineered Quartz Slabs are at risk for significant crystalline silica exposure. In this SDS during the Fabricating Process (includes Cutting, Chipping, Drilling, and other manufacturing processes which is done for the end use of the Slabs) it is necessary to consider the following information.

#### Potential Health Effects

**Inhalation:** Do not breathe dust.

Workers who inhale very small crystalline silica particles are at risk for silicosis – an incurable, progressively disabling and sometimes fatal lung disease. Silicosis results in permanent lung damage. Silica dust particles become trapped in lung tissue, causing inflammation and scarring and reducing the lungs' ability to take in oxygen. Symptoms of silicosis can

include shortness of breath, cough and fatigue, and may or may not be obviously attributable to silica. Workers exposed to airborne crystalline silica also are at increased risk for lung cancer, Chronic Obstructive pulmonary disease (COPD) and kidney disease, and according to certain medical schools of thoughts, such workers are also at increased risk for auto-immune diseases (for example rheumatoid arthritis).

**Skin and Eye Contact:** Mineral dust may produce transitory mechanical irritation to skin and eyes.

**Aggravation of Pre-existing Conditions:** Persons with impaired respiratory function and chronic respiratory disorders may be more susceptible to the effects of this substance and may be adversely affected by any airborne particulate matter exposure. Inhalation may increase the progression of tuberculosis.

#### Prevention

- Do not handle until all safety precautions have been read and understood.
- Do not breathe dust generated during the Fabrication Process, installation and removing/demolishing processes.
- Wash face and hands thoroughly after handling using Air and then wet cleaning.
- Wear respiratory protection for particles like a Dust mask and Safety goggles for eye protection.

## 4: First aid measures

### General Advice:

- Immediate Medical attention if required to move out of the dangerous area.
- Show this Safety Data sheet to the Medical officer.

### Eye Contact with Dust:

- Do not scratch; flush out eyes continuously with water until the irritation is gone.
- If irritation persists seek medical attention.

### Skin Contact with Dust:

- Remove dust from the affected area using compressed air and then wash using Soap and Water.
- If irritation persists seek medical attention.

### Inhalation of Dust:

- Remove person to fresh air.
- If breathing has stopped, administer artificial respiration and seek immediate medical attention.

### Ingestion of Dust:

- There is no chance for Dust inhalation when the product is used in its normal form. While fabrication there may be chances of dust generation.
- If inhaled more please seek medical attention.

## 5: Firefighting measures

**Auto-ignition:** Engineered Quartz Slabs do not burn normally and can be burnt with an external source.

**Fire Spreading Rating:** class A 0-25

**Smoke Developed Rating:** 0-450

**Flash Point:** 490 C

**Extinguishing Media:** Water, dry chemical, CO2 and foam

**Fire Fighting Procedures:** Keep personnel away and fire fight in the Upwind direction.

Fire fighters are recommended to use PPE's like SCBA etc.

**Unusual Fire Hazards:** Degradation of the product under elevated temperature may result in the release of Carbon oxides, Iron oxide fumes etc.

## 6: Accidental Release Measures

**This product doesn't have any risk of spillage under normal intended uses.**

**Cleanup and Disposal of Spill:** Solid slabs can simply be gathered and disposed of as necessary. However, if large amounts of dust or waste are created by cutting during the Fabrication Process, use wet, vacuum system or dampen spilled material with water and sweep up the wet material to avoid dust generation - do not dry sweep. Wear suitable respiratory protection and protective clothing.

## 7: Handling and storage

### Handling:

Quartz Slabs are very heavy and breakable hence should be handled with care. While handling personnel should wear safety helmets, safety shoes and hand gloves. Fall of slabs / slab pieces on to the body parts can be fatal.

### Storage:

Material to be stored interiors only. Should avoid exposure to sunlight and rain which will affect the functional requirements of the product. In cases of storing the material outside cover the slabs properly and avoid exposure to weather conditions.

## 8: Exposure / Control Protection

**Exposure Guidelines:** Permissible Exposure Limit (PEL)

No exposure limit under normal product usage.

Dust generation while fabrication has to be taken care of. OSHA determined a general dust PEL of 15 mg/m<sup>3</sup>, a general respirable dust PEL of 5 mg/m<sup>3</sup> and a titanium dioxide PEL of 15mg/m<sup>3</sup>.

The above given values may differ for each region so please go through local regulations before fabrication.

### Exposure Control

**Manufacturing and Installation:** Dust derived from the Fabrication Processes contains crystalline silica (SiO<sub>2</sub>). Exposure to SiO<sub>2</sub> dust without the use of suitable protection may cause serious diseases.

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

**Engineered Controls:** CNC machines and wet cutting methods are recommended to reduce the generation of dust. When fabricating the product, installing or removing/demolishing the installed product, use equipment with integral dust collection and/or use local exhaust ventilation in a safe manner to maintain the ambient workplace atmosphere below the relevant PEL.

**Cleaning and Maintenance:** Use a vacuum and/or water cleaning systems. Never dry sweep or use compressed air.

**Personal Protective Equipment:**

**Eye/Face Protection:** During Fabrication operations use dust-proof goggles or safety glasses with side shields.

**Hand and Skin Protection:** During cutting, grinding or sanding operations, use appropriate body protection for tasks including work gloves if handling sharp or rough edges and steel toed shoes if lifting product.

## 9: Physical and chemical properties

Appearance	Multi-colored solid engineered stone
Odor	Odorless
pH	NA
Melting Point/Freezing Point	NA
Initial Boiling Point/Boiling Range	NA
Flash Point	490°C
Evaporation Rate	NA
Flammability	NA
Upper and Lower Flammability/ Explosive Limits	NA
Vapor Pressure	NA
Vapor Density	NA
Relative Density (EN-14617-1)	2188-2405 kg/m <sup>3</sup>
Solubility	Insoluble in water
Decomposition Temperature	NA
Auto-ignition Temperature	NA

## 10: Stability and Reactivity

**Reactivity:** The product is stable under normal conditions of use, storage and transport.

**Chemical Stability:** Stable at normal temperatures and storage conditions.

**Physical Stability:** Avoid strong impacts that may cause the material to break.

**Incompatibility with Other Materials:** This product is incompatible with hydrofluoric acid.

**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.

## 11: Toxicological Information

**No acute or chronic effects are known from exposure to the intact product.**

Health effects from the likely routes of exposure (inhalation, ingestion, skin and eye contact)

### **Primary Routes of Exposure:**

None for the intact product. Inhalation and potential exposure to eyes, hands, lungs or other body parts if contact is made with dust emitted from the Fabrication Process.

### **Acute Effects:**

Breathing dust may cause acute mechanical respiratory irritation. Skin and eye contact may cause mechanical irritation. 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.

### **Respiratory Effects:**

Crystalline silica (Respirable size) has been classified by the IARC as group 1 carcinogen to humans.

## 12. Ecological Information

**Environmental Fate:** Not determined

**Environmental Toxicity:** Not determined

GREENGUARD Certification gives assurance that VIVA Quartz Surfaces are safe for indoor air quality, children, and schools.

ANSI Standard 051 – Food Equipment Materials granted by NSF proves the product to be safe for food contact.

**Environmental Fate:** No data

**Environmental Toxicity:** No data

## 13: Disposal Considerations

**Waste Disposal Method:** Preferred options for disposal are (1) recycling, and (2) landfill. All disposal must be carried out in accordance with all the laws, requirements and, guidelines applicable in the location of the user of VIVA products. Performance of landfills should be made in an appropriate waste disposal facility approved by local authorities.

## 14: Transportation Information

No regulatory instructions available, always transport in accordance with the law applicable.

## 15: Regulatory Information

Fire Hazard: No

Reactive Hazard: No

Release of Pressure: No

Acute Health Hazard: No

Chronic Health Hazard: Yes

U.S. State Regulations: California Prop 65 List: Crystalline silica (Quartz) is classified as a substance known to the state of California to be a carcinogen.

During cutting, grinding or sanding operations, use appropriate body protection for tasks including work gloves if handling sharp or rough edges and steel-toed shoes if lifting product.

## 16: Other information

ACGIH	American Conference of Governmental Industrial Hygienists
IARC	International Agency for Research on Cancer
OSHA	Occupational Safety and Health Administration
NA	Not Applicable
NTP	National Toxicology Program
PEL (OSHA)	Permissible Exposure Limit
STEL	Short Term Exposure Limit
TLV	Threshold Limit Value
TWA	Time Weighted Average

