

Safety Data Sheet

Engineered Quartz Stone Slabs

Prepared in accordance with the OSHA Hazard Communication Standard, 29 CFR 1910.1200(g) (16-section format). Language: English.
Applies to all colors, patterns, finishes and thicknesses of Petros® engineered quartz stone slabs.

1. IDENTIFICATION

Product identifier	Petros® Engineered Quartz Stone Slabs (all colors, patterns and finishes)
Other names	Engineered quartz; quartz surfaces; engineered stone; agglomerated quartz slabs
Product form	Solid slab (finished article as supplied)
Recommended use	Prefabricated interior countertops, vanity tops and wall cladding, supplied fully fabricated (cut to size, edges profiled and polished, sink, faucet and cooktop cut-outs completed) and ready to install without further cutting. All fabrication is carried out by Petros Stone LLP before delivery.
Uses advised against	Cutting, drilling, grinding, polishing or sanding delivered pieces on site; any dust-generating process without the controls in Sections 7 and 8; use as a structural material.
Supplier	Petros Stone LLP Sr.25, Handewadi Rd, Kanade Nagar, Undri, Pune, Maharashtra 411060, India
Telephone / email / web	+91 9422079858 info@petrosstone.com www.petrosstone.com
Emergency telephone	+91 9422079858 (Petros Stone LLP)
Manufacturer / exporter	Petros Stone LLP, Pune, Maharashtra, India
SDS number / revision	PS-SDS-QZ-008 Revision 8, 22 May 2026

2. HAZARD(S) IDENTIFICATION

Status of the product. As supplied, the solid slab or prefabricated piece does not present an immediate health hazard: it is odorless, stable and not flammable. It contains crystalline silica. Petros Stone LLP carries out all cutting, edging, sink and cooktop cut-outs, drilling and polishing at its own facility before delivery, and delivered pieces are installed without further cutting. Those fabrication operations release dust that contains **respirable crystalline silica (quartz and, where present, cristobalite)**. The same applies if a delivered piece is later cut, drilled, ground, polished, broken or demolished. In plain terms: the finished piece is safe to handle, install, use and clean. The classification below applies only to the dust created when stone is cut, ground or polished, and the risk is managed by the controls in Sections 7 and 8.

Classification (29 CFR 1910.1200(d)): dust generated during fabrication or installation

Hazard class	Category	Hazard statement
Carcinogenicity (inhalation)	1A	H350 – May cause cancer by inhalation.
Specific target organ toxicity – repeated exposure (lungs, inhalation)	1	H372 – Causes damage to organs (lungs) through prolonged or repeated inhalation.



Signal word: DANGER

Hazard statements: H350 May cause cancer by inhalation. H372 Causes damage to lungs through prolonged or repeated inhalation.

Pictogram: GHS08 – Health hazard

Precautionary statements (apply to dust-generating work)

- Prevention:** P201 Obtain special instructions before use. P202 Do not handle until all safety precautions have been read and understood. P260 Do not breathe dust. P264 Wash hands and exposed skin thoroughly after handling. P270 Do not eat, drink or smoke when using this product. P280 Wear protective gloves, protective clothing and eye/face protection, and respiratory protection as specified in Section 8.
- Response:** P308 + P313 IF exposed or concerned: get medical advice/attention. P314 Get medical advice/attention if you feel unwell.
- Disposal:** P501 Dispose of contents and container in accordance with local, state and federal regulations.

Other hazards not resulting in classification

- Pieces are heavy and brittle. Lift with proper equipment and keep clear of falling or tipping pieces to avoid crushing injuries and cuts.
- Dust may cause transient mechanical irritation of the eyes, nose, throat and skin. Cutting and polishing generate noise and wet slurry (slip hazard).
- Breathing silica dust over a long period without controls can cause silicosis, a serious lung disease that may develop years later. It is preventable with the controls in Sections 7 and 8.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Mixture: solid slab composed of ground natural quartz bound with a cured polyester resin, with pigments and optional additives. Composition varies by color and pattern; figures are the maximum for the product range. No ingredient identity is withheld as a trade secret.

Component	CAS No.	% by weight (maximum for range)
Crystalline silica – quartz and, where present, cristobalite (SiO ₂)	14808-60-7 (quartz); 14464-46-1 (cristobalite)	Up to 93 %
Unsaturated polyester resin (cured binder)	Mixture	5 – 15 %
Inorganic pigments, including titanium dioxide	13463-67-7 (TiO ₂)	Up to 5 %
Other additives and recycled mineral content (e.g. glass, mirror)	Mixture	Up to 15 %

Figures are conservative maximums that cover the whole Petros® quartz range; individual colors contain less of some components. Cristobalite, where present, is included in the crystalline silica figure. Crystalline silica is the only ingredient that drives the hazard classification.

4. FIRST-AID MEASURES

These measures apply to exposure to dust from fabrication; intact slabs do not require first aid for exposure to the material itself.

Inhalation	Move the person to fresh air and keep at rest. If breathing is difficult or has stopped, give artificial respiration and call emergency services. Seek medical advice if coughing, wheezing, breathlessness or chest discomfort develops or persists.
Eye contact	Do not rub. Flush with plenty of clean water for at least 15 minutes, lifting the eyelids and removing contact lenses if easy to do. Seek medical attention if irritation persists.
Skin contact	Wash with soap and water. Do not use compressed air to remove dust from skin or clothing. Seek medical attention if irritation persists. Clean cuts thoroughly and obtain treatment for deep wounds.
Ingestion	Not a likely route for intact slabs. If dust is swallowed, rinse the mouth and drink water; seek medical advice if symptoms occur.
Most important symptoms and effects	Acute: cough, throat and eye irritation. Chronic or delayed: shortness of breath, persistent cough, fatigue, weight loss, which may indicate silicosis. Symptoms may not appear for years.
Note to physicians	Treat symptomatically. Consider exposure history to crystalline silica. Workers with silicosis should be evaluated for tuberculosis, other lung disease, kidney disease and autoimmune disease. Show this SDS to the physician.

5. FIRE-FIGHTING MEASURES

Flammability	The mineral content does not burn. The cured resin binder is combustible only under sustained high heat.
Suitable extinguishing media	Water spray, dry chemical, carbon dioxide or foam, as appropriate for the surrounding fire.
Hazards from combustion	Heating or burning the resin may release carbon monoxide, carbon dioxide, hydrocarbons, styrene and other organic vapors and smoke. Heated slabs may crack or spall.
Protective actions for firefighters	Wear self-contained breathing apparatus and full protective clothing. Fight the fire from an upwind position. Avoid creating airborne dust from fire debris.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions	Intact slabs: restrict access, wear safety shoes, cut-resistant gloves and eye protection, and use mechanical lifting equipment for broken pieces. Dust or dried slurry: avoid breathing dust and wear the respiratory protection described in Section 8.
Containment and clean-up	Do not dry sweep and do not use compressed air. Use wet methods or a vacuum fitted with a HEPA filter. Collect dust, dried slurry and debris in sealed, labeled containers. Wet cleaning of floors and surfaces after work is recommended.
Environmental precautions	Keep slurry and cutting water out of storm drains, sewers and watercourses. Allow solids to settle or filter the water before discharge or reuse, as local rules require.

7. HANDLING AND STORAGE

Precautions for safe handling

- **Delivered pieces:** pieces are supplied fully fabricated. Install them as delivered. Do not cut, drill, grind, polish or sand them on site. If an unplanned change is unavoidable, contact Petros Stone LLP first and treat it as a dust-generating task: wet methods or HEPA extraction, respiratory protection and the controls below.
- **Lifting and moving:** use A-frames, slab clamps, vacuum lifters, cranes or forklifts rated for the load; never carry large slabs by hand. Wear safety helmet, safety shoes with toe protection and cut-resistant gloves. Keep people clear of the path of loads.
- **Fabrication (carried out at the Petros facility before delivery; also applies if a piece is later modified):** use wet cutting, wet grinding and wet polishing with a constant, adequate flow of water at the tool. Use CNC or bridge saws with integrated water supply and enclosures where available. Use tools with integral dust extraction and a HEPA filter where wet methods are not possible.
- Separate dust-generating work from other work areas and keep non-essential people out. Do not dry cut, and do not carry out dry grinding or dry polishing.
- **Hygiene:** do not eat, drink or smoke in work areas. Wash hands and face before breaks and at the end of the shift. Use disposable coveralls or launder work clothing at the workplace; do not take dusty clothing home. Do not clean clothing with compressed air.
- Follow the employer's written exposure control plan, training and medical surveillance requirements (see Sections 8 and 15).

Conditions for safe storage

- Store indoors, dry and protected from rain, moisture and strong sunlight. If stored outdoors, cover and secure the slabs.
- Store slabs upright on A-frames or racks with secure restraints on a level surface, or flat on suitable supports. Do not stack loosely or lean against walls.
- Keep away from hydrofluoric acid and strong chemicals that can damage the surface (see Section 10). Protect edges and corners from impact.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Occupational exposure limits (respirable fraction unless stated)

Substance	OSHA PEL (8-h TWA)	OSHA action level	NIOSH REL	ACGIH TLV (8-h TWA)
Respirable crystalline silica (quartz, cristobalite)	50 µg/m³	25 µg/m³	50 µg/m³ (10-h TWA)	25 µg/m³
Titanium dioxide	15 mg/m³ (total dust)	N.E.	See current NIOSH guidance	See current ACGIH TLV listing
Particulates not otherwise regulated	15 mg/m³ total; 5 mg/m³ respirable	N.E.	N.E.	See current ACGIH TLV listing

TWA = time-weighted average. N.E. = not established. Limits are for airborne dust. Verify current values and any stricter state or local limits before use.

Engineering controls

- **Wet methods first.** Apply water continuously at the point where the tool contacts the stone. Maintain water supply, nozzles and filtration.
- Use local exhaust ventilation with HEPA filtration, and enclosures or CNC machines with integrated water systems, to keep dust below the limits above.

- Clean by wet methods or a HEPA vacuum. Never dry sweep or use compressed air on dust or on clothing.
- In construction work, follow the control methods in Table 1 of 29 CFR 1926.1153 for the tool and task, or measure exposure and control it to below the PEL.

Personal protective equipment

- **Respiratory:** select a NIOSH-approved respirator of the assigned protection factor required for the task, the duration and the measured exposure. A disposable nuisance dust mask is not adequate. Where respirators are required, provide a respiratory protection program with medical evaluation, fit testing and training (29 CFR 1910.134).
- **Eyes / face:** dust-proof goggles or safety glasses with side shields; a face shield when cutting or grinding.
- **Hands / body:** cut-resistant gloves for handling slabs; coveralls that are launderable at work or disposable; safety shoes with toe protection; safety helmet when lifting.
- **Hearing:** hearing protection during cutting, grinding and polishing.

Personal protection information is general and applies to normal use. For unusual conditions, obtain advice from a qualified industrial hygienist.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Solid slab, various colors and patterns
Odor / odor threshold	Practically odorless / not applicable
pH	Not applicable
Melting / freezing point	Not applicable (resin binder softens and decomposes on heating)
Initial boiling point and range	Not applicable
Flash point; auto-ignition temperature	Not applicable
Flammability; flammability limits	Not flammable as supplied; not applicable
Evaporation rate; vapor pressure; vapor density	Not applicable
Density	Typically about 2,200 – 2,450 kg/m ³ , depending on color and pattern
Solubility in water	Insoluble
Partition coefficient (n-octanol/water)	Not applicable
Decomposition temperature; viscosity	Not determined; not applicable

10. STABILITY AND REACTIVITY

Reactivity	Not reactive under normal conditions of use, storage and transport.
Chemical stability	Stable under normal temperatures and storage conditions.
Hazardous reactions	None known. Hazardous polymerization will not occur.
Conditions to avoid	Dust generation; impact that may break the slab; sustained high heat or direct flame (use trivets for hot cookware); dry cutting, grinding or polishing.
Incompatible materials	Hydrofluoric acid and fluoride-based cleaners (attack silica). Strong acids, strong alkalis and aggressive solvents or paint strippers may damage or discolor the resin surface.
Hazardous decomposition products	On heating or burning: carbon monoxide, carbon dioxide, hydrocarbons, styrene and other organic vapors.

11. TOXICOLOGICAL INFORMATION

Information relates to respirable crystalline silica dust released during fabrication and installation. No hazard is expected from handling the intact slab.

Routes of exposure	Inhalation (primary); eye and skin contact with dust; cuts from edges and broken pieces.
Acute effects	Irritation of the eyes, nose, throat and skin. Very high dust exposures over a short period can cause acute silicosis, a serious lung condition. This is rare and is associated with uncontrolled dust.

Chronic effects	Repeated inhalation of respirable crystalline silica can cause silicosis (chronic, accelerated and acute forms), lung cancer, chronic obstructive pulmonary disease (COPD), and kidney disease. It is associated with an increased risk of tuberculosis and with autoimmune disease. These effects are linked to long-term, uncontrolled exposure, not to the finished product. Severe and rapidly progressing silicosis has been reported in workers fabricating engineered stone.
Carcinogenicity	IARC Group 1 (carcinogenic to humans) for inhalation of respirable crystalline silica from occupational sources. NTP: known human carcinogen. ACGIH: A2, suspected human carcinogen. Titanium dioxide: IARC Group 2B (airborne, unbound respirable particles).
Aggravating factors	Smoking and existing respiratory disease may increase the risk and severity of effects.
Acute toxicity values	No acute toxicity data for the mixture. Oral and dermal toxicity are not expected for the intact product.
Mutagenicity; reproductive toxicity	No classification.

12. ECOLOGICAL INFORMATION

The slab is an inert, water-insoluble solid and is not expected to be hazardous to the environment. No ecotoxicity, persistence, bioaccumulation or mobility data are available for the product. Do not allow slurry or dust to reach drains, soil or surface water.

13. DISPOSAL CONSIDERATIONS

- Intact off-cuts and broken pieces: recycle where possible, otherwise dispose of in a landfill permitted to accept construction waste.
- Dust, dried slurry and filter residue: collect in sealed, labeled containers or bags without creating dust, and dispose of in accordance with federal, state and local regulations. Keep wet or bagged during transport.
- Waste is not expected to be hazardous waste under US federal rules when disposed of as solid waste; check state and local requirements.
- Handle used HEPA filters and vacuum contents as dust-contaminated waste. Do not burn.

14. TRANSPORT INFORMATION

DOT (US) / IATA / IMDG	Not regulated as a dangerous good.
UN number; proper shipping name; class; packing group	Not applicable.
Environmental hazards	None.
Special precautions	Slabs are heavy and fragile. Transport on A-frames or in crates, secured against shifting, and protected from impact and moisture. Use appropriate lifting equipment and a trained rigger.

15. REGULATORY INFORMATION

OSHA (US)	Hazardous Chemical under the Hazard Communication Standard (29 CFR 1910.1200) as to dust generated by fabrication. Respirable crystalline silica is regulated by 29 CFR 1926.1153 (construction) and 29 CFR 1910.1053 (general industry and maritime). Employers must assess exposure, implement controls, train workers, and provide medical surveillance where required.
OSHA HCS hazard categories	Meets the Hazard Communication Standard definition of a health hazard (see Sections 2 and 11). No physical hazards.
State right-to-know	Crystalline silica is listed as hazardous or toxic on state right-to-know lists, including those of Massachusetts, New Jersey and Pennsylvania.
Note	The information in this SDS relates to the hazards of dust produced when cutting, grinding, polishing or otherwise changing the shape of the product.

16. OTHER INFORMATION

Date of preparation	21 October 2026
Revision	Revision 8
Prepared by	Petros Stone LLP, Authorised Signatory

Key to abbreviations

ACGIH – American Conference of Governmental Industrial Hygienists; CAS – Chemical Abstracts Service; CFR – Code of Federal Regulations; GHS – Globally Harmonized System; HCS – Hazard Communication Standard; HEPA – high-efficiency particulate air; IARC – International Agency for Research on Cancer; NIOSH – National Institute for Occupational Safety and Health; NTP – National Toxicology Program; OSHA – Occupational Safety and Health Administration; PEL – permissible exposure limit; REL – recommended exposure limit; TLV – threshold limit value; TWA – time-weighted average.

Disclaimer. The information in this SDS is believed to be accurate as of the date of issue and is based on data available to Petros Stone LLP. It is provided for hazard communication and is not a warranty. It relates to the product as described and may not apply if the product is used with other materials or in other processes. Users must make their own assessment of the suitability of the information and comply with all applicable laws. Contact Petros Stone LLP for the latest revision.