



ULTRA
QUARTZ

QUARTZ SAFETY DATA SHEET (SDS)

Ultra Quartz Surfaces

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Prepared By: ULTRA STONES LLC

Website: Luxury Granite, Marble & Quartz Countertops - Ultra Stones

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: Ultra Quartz Surfaces

Common Names: Engineered Quartz, Quartz Slabs, Quartz Stone

Recommended Use:

Interior design applications including kitchen countertops, vanity tops, wall cladding, bar tops, backsplashes, and flooring in residential and commercial settings.

Uses Advised Against:

- Outdoor installations exposed to prolonged UV radiation.
- Applications involving direct contact with open flames or extreme heat.
- Fabrication by dry cutting or grinding.

Company Information:

Company Name: ULTRA STONES LLC

Address:

New York Showroom: 55 Central Drive, Farmingdale, NY 11735

Contact: 631-873-4747 / 631-873-4748

Pennsylvania Showroom: 3907 Nebraska St, Levittown, PA 19056

Contact: 215-647-3972 / 215-647-3974

2. MATERIAL COMPOSITION

Substance	CAS Number	Approximate %
Crystalline Silica (Quartz)	14808-60-7	85-90
Polyester Resin (unsaturated)	Mixture	5-15
Cristobalite	14464-46-1	0-50
Titanium Dioxide	13463-67-7	0-4
Pigments, and Other Additives	N/A	0-5

Note: Composition may vary slightly depending on slab color and pattern.

3. HAZARD(S) IDENTIFICATION

Quartz surface products are considered non-hazardous in their finished and shipped form. Dust derived from fabrication of quartz surfaces can cause the following symptoms and diseases

Respiratory Effects: Fabrication activities such as sawing, grinding, routing, drilling, and sanding can produce dust, which may lead to upper respiratory tract irritation upon inhalation. Symptoms associated with this exposure can include a burning sensation, coughing, sneezing, and a sore throat.

Skin Irritation: Contact with dust may result in temporary mechanical irritation of the skin, manifesting as redness and itching.

Eye Irritation: High levels of dust exposure may also irritate the eyes, causing symptoms like burning, redness, and tearing.

Silicosis: Prolonged exposure to airborne crystalline silica presents significant health risks, including silicosis—a chronic and progressive lung disease characterized by the formation of scar tissue due to silica accumulation. Symptoms of silicosis can include persistent coughing, breathing difficulties, wheezing, and a gradual decline in lung function.

Lung Cancer: Studies indicate a potential link between crystalline silica exposure and an increased risk of lung cancer, particularly among workers in industries such as stone cutting and processing. Individuals with existing respiratory conditions or skin disorders may be more vulnerable to the adverse effects of fume and particulate matter exposure.

Classification of the Substance or Mixture

Global Harmonized Standard Classification (GHS) Classification (Fabrication-Related Dust):

- Carcinogenicity (Inhalation): Category 1A
- STOT - Repeated Exposure (Lungs): Category 1
- STOT - Single Exposure (Respiratory): Category 3

GHS-US/CA Labeling

Hazard Pictograms (GHS-US/CA) :



GHS07



GHS08

Signal Word (GHS-US/CA): Danger

Hazard Statements:

- H350: May cause cancer via inhalation of crystalline silica dust
- H335: May cause respiratory irritation
- H372: Prolonged or repeated inhalation may cause damage to lungs

Precautionary Statements:

- **P201** – Obtain special instructions before use.
- **P202** – Do not handle until all safety precautions have been read and understood.
- **P260** – Do not breathe dust generated during fabrication.
- **P264** – Wash skin and hands thoroughly after handling.
- **P270** – Do not eat, drink, or smoke during fabrication.
- **P271** – Use only in well-ventilated or controlled environments.
- **P272** – Contaminated clothing must not be allowed out of the workplace.
- **P280** – Wear protective gloves, clothing, and eye protection.
- **P284** – Wear NIOSH-approved respiratory protection.
- **P308+P313** – If exposed or concerned: Get medical advice/attention.
- **P362+P364** – Take off contaminated clothing and wash before reuse.
- **P501** – Dispose of contents/container in accordance with local, state, and federal

4. FIRST AID MEASURES**Eye Contact:**

Flush eyes immediately with plenty of water for at least 15 minutes. Remove contact lenses if present. Seek medical attention if irritation persists.

Skin Contact:

Wash thoroughly with soap and water. Remove contaminated clothing. If irritation develops, seek medical advice.

Inhalation:

Move the affected person to fresh air. If breathing difficulties occur, administer oxygen and seek immediate medical attention.

Ingestion:

Not expected under normal use. If large quantities are swallowed, seek medical help.

Most Common Symptoms:

- Respiratory discomfort
- Coughing or wheezing
- Irritation of eyes or skin from dust

Important Symptoms and Effects – Acute and Delayed

General: Processing this material may generate hazardous dust. Exposure to this dust can cause mechanical irritation to the eyes, nose, throat, and lungs. Inhalation may lead to cancer and can result in lung damage following prolonged or repeated exposure.

Inhalation: Exposure to dust may irritate the respiratory system. Inhaling this dust may increase the risk of cancer. Prolonged or repeated exposure to respirable crystalline silica can lead to lung damage, including silicosis.

Skin Contact:

Skin contact with large amounts of dust may cause mechanical irritation, including redness and itching.

Eye Contact: Eye contact with dust may cause mechanical irritation, including burning, redness, and tearing.

Ingestion: For exposure to particulates or dust: Rinse the mouth thoroughly. Do not induce vomiting. Seek medical attention.

Chronic Symptoms: May cause cancer (inhalation). Causes damage to organs (lungs) through prolonged or repeated exposure (inhalation). Dry sawing or grinding of crystalline silica-containing stone products will result in the release of respirable crystalline silica. Prolonged exposure to respirable crystalline silica may cause delayed (chronic) lung injury (silicosis). Acute or rapidly developing silicosis may occur in a short period of time under heavy exposure. Silicosis is a form of disabling pulmonary fibrosis which can be progressive and may lead to death. Long-term exposure to respirable crystalline silica results in a significant risk of developing silicosis and other non-malignant respiratory disease, lung cancer, kidney effects, and immune system effects.

Indication of Immediate Medical Attention and Special Treatment Required

If exposed to or concerned about exposure to respirable crystalline silica, seek medical advice and attention. If medical advice is needed, have product SDS or label at hand. Disorders or diseases of the respiratory system may be aggravated by exposure to high concentrations of crystalline silica. Individuals with pre-existing conditions of the lungs may have increased susceptibility.

5. FIREFIGHTING MEASURES

Ultra Quartz surfaces are not flammable or explosive.

Suitable Extinguishing Media:

Use extinguishers appropriate for surrounding fire – water, foam, CO₂, or dry chemicals.

Fire Hazards:

This material is non-flammable. However, decomposition of resins at high temperatures may produce CO, CO₂, hydrocarbons, and metal oxides.

Firefighting Instructions:

- Always use self-contained breathing apparatus with a dust-proof full face mask.
- Do not enter the fire area without protective equipment.
- Avoid inhaling combustion gases.

6. ACCIDENTAL RELEASE MEASURES**General Precautions:**

- Avoid inhaling dust.
- Avoid exposure to eyes and skin.
- Wear appropriate PPE (respirator, goggles, gloves) while cleaning.
- Evacuate non-specialist personnel.

Environmental Precautions:

Prevent large amounts of dust from entering storm drains or natural waterways. If significant amounts of this material flow into the waterways, please reach out to the Environmental Protection Authority or your local Waste Management Authority.

Methods for Clean-Up and Disposal:

For large dust spills: Use HEPA-filtered vacuum systems.
For solid pieces: Collect manually using safe lifting techniques.
Never dry-sweep crystalline silica dust.
Dispose of waste in compliance with local, state and federal regulation.

7. HANDLING AND STORAGE

Safe Processing and Handling:

- Always use wet cutting methods to minimize dust.
- Wear protective gear during fabrication.
- Do not perform dry grinding, cutting, or drilling.
- Practice good hygiene—wash thoroughly after handling.
- Review all safety instructions before use and handle only after understanding them. Avoid inhaling dust and prevent contact with eyes, skin, and clothing. Wash exposed areas thoroughly before eating, drinking, smoking, or leaving the work area.
- Refer to the OSHA Respirable Crystalline Silica Standard (29 CFR 1910.1053) for requirements on exposure controls, protective equipment, and medical surveillance. See: <https://www.osha.gov/silica-crystalline/general-industry-maritime>
- In California, refer to the Emergency Temporary Standard on Respirable Crystalline Silica for General Industry (Title 8, Section 5204). See: <https://www.dir.ca.gov/dosh/respiratory-silica-FAQ.html>

Safe Storage:

- Store in dry, enclosed spaces.
- Avoid exposure to direct sunlight and high humidity.
- Use proper A-frames or slab racks to prevent tip-over hazards.
- Keep away from acids.

Technical Measures: Adhere to applicable regulations.

End Use(s): Countertops, wall cladding, flooring, etc.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

U.S. Exposure Guidelines – Crystalline Silica (Quartz & Cristobalite)

Authority	Substance	Limit
OSHA PEL (29 CFR 1910.1053)	Respirable Crystalline Silica (Quartz, Cristobalite, Tridymite)	50 µg/m ³ TWA (respirable dust)
OSHA Action Level	Respirable Crystalline Silica	25 µg/m ³ TWA
OSHA IDLH	Respirable Crystalline Silica (Quartz)	50 mg/m ³ (respirable dust)
OSHA IDLH	Cristobalite	25 mg/m ³ (respirable dust)
ACGIH TLV	Respirable Crystalline Silica (Quartz & Cristobalite)	0.025 mg/m ³ 8-hr TWA – A2 Suspected Human Carcinogen
NIOSH REL	Respirable Crystalline Silica (Quartz & Cristobalite)	0.05 mg/m ³ 8-hr TWA (respirable dust)

U.S. Exposure Guidelines – Titanium Dioxide

Authority	Limit
OSHA PEL	15 mg/m ³ (total dust)
ACGIH TLV	2.5 mg/m ³ (respirable fine-scale particles) – Confirmed Animal Carcinogen
NIOSH REL	2.4 mg/m ³ fine; 0.3 mg/m ³ ultrafine/nanoscale (CIB 63)
IDLH	5,000 mg/m ³

Engineering Controls:

- CNC machines and wet cutting techniques are advised to minimize dust production. When fabricating the product, as well as during installation or removal/demolition of the installed product, utilize equipment with built-in dust collection and/or implement local exhaust ventilation safely to ensure that the ambient workplace atmosphere remains below the applicable permissible exposure limit (PEL).
- Ensure proper ventilation to maintain dust exposure at levels below the recommended limits.
- Keep work areas clean and free of accumulated dust.

Personal Protective Equipment (PPE):

Eye/Face Protection: Wear dust-proof safety glasses or full-face shield to prevent exposure to dust.

Respiratory Protection: Use respiratory protection equipment certified by the National Institute for Occupational Safety and Health (NIOSH) to avoid inhalation of silica dust during the fabrication process. The choice of respirator should be based on the type and level of exposure. In situations where there is a risk of uncontrolled release, unknown exposure levels, or any other circumstance where air-purifying respirators may not offer sufficient protection, a positive pressure air-supplied respirator should be used.

Skin Protection: Wear cotton or leather work gloves and steel-toed shoes when handling and transporting the product. During fabrication, use protective clothing to reduce cuts and skin exposure to dust. Always wash hands before eating, drinking, smoking, or using the restroom, and clean thoroughly with soap and water after work. Get rid of dusty clothing promptly, as it can have respirable silica, and wash it separately on-site before reuse.

9. PHYSICAL AND CHEMICAL PROPERTIES

Property	Value
Physical State	Solid
Appearance	Multi-colored solid slabs (various colors and patterns)
Odor	Odorless
Relative Density	2.2–2.5 g/cm ³
Solubility in Water	Insoluble
Flash Point	Not applicable
Melting Point	>1700°C (quartz component); Not applicable for finished product

Freezing Point	Not applicable
Boiling Point	Not applicable
Auto-ignition Temperature	Not applicable
Decomposition Temperature	Not applicable
Flammability (solid/gas)	Not applicable ³
Vapor Pressure	Not applicable
Vapor Density	Not applicable
Evaporation Rate	Not applicable
pH	Not applicable
Viscosity	Not applicable

10. STABILITY AND REACTIVITY

- **Chemical Stability:** The material is stable under normal temperatures and storage conditions
- **Reactivity:** The material is non-reactive under normal storage, use, and transport conditions.
- **Incompatible Materials:** The material can react in contact with strong acids, especially hydrofluoric acid
- **Hazardous Decomposition Products:** Thermal decomposition can release various hydrocarbons, CO₂, CO, and water. Even fumes of metal oxides and mica particles can also be released.
- **Hazardous Polymerization:** Will not occur.

11. TOXICOLOGICAL INFORMATION

Ultra Quartz slabs in its intact and finished form have no reports of having any acute or chronic effects.

LD50 and LC50 Data: Components are not acutely toxic.

Skin Corrosion/Irritation: Not classified.

Eye Damage/Irritation: Not classified.

Germ Cell Mutagenicity: Not classified. No data available.

Reproductive Toxicity: Not classified. No data available.

Developmental Effects: Not classified. No data available.

Aspiration Hazard: Not classified.

Primary Routes of Exposure

None of the finished product. Inhalation and prolonged exposure to eyes, hands, lungs or other body parts if contact is made with dust or debris during cutting, grinding, or polishing Ultra Quartz products.

Acute Effects: Inhaling dust generated from the fabrication processes may cause severe mechanical respiratory irritation, including wheezing, coughing or difficulty breathing.

Skin Irritation:

Potential exposure to skin can cause acute skin irritation.

Eye Problems:

Potential exposure to eyes can cause sensations like burning, redness, and tearing.

Potential Health Effects:

Crystalline Silica (SiO₂)

Prolonged exposure to respirable crystalline silica above permissible limits—and/or failure to follow safety guidelines—may cause silicosis, a type of nodular pulmonary fibrosis (NPF). NPF is linked to conditions such as tuberculosis, bronchitis, emphysema, COPD, and other respiratory diseases. Chronic silica exposure may also lead to autoimmune disorders, kidney disease, and other health issues. Symptoms like labored breathing and fatigue may signal silicosis but can also result from various other causes.

Titanium Dioxide (TiO₂)

Inhalation of respirable titanium dioxide may lead to lung fibrosis and particle buildup. NIOSH recommends a TWA exposure limit of 2.4 mg/m³ for fine TiO₂ (up to 10 hours/day, 40 hours/week), keeping lifetime lung cancer risk below 1 in 1,000.

Carcinogenicity Classification

Material	IARC	OSHA	NTP	ACGIH
Silica, Crystalline (Quartz & Cristobalite)	Group 1 – Carcinogenic to humans	Listed – OSHA Hazard Communication Carcinogen List	Known to be a human carcinogen	A2 – Suspected Human Carcinogen
Titanium Dioxide	Group 2B – Possible carcinogen	Not listed)	Not listed)	Confirmed Animal Carcinogen with Unknown Relevance to Humans

Chronic Symptoms

May cause cancer. Causes damage to organs (lungs) through prolonged or repeated exposure (inhalation). Dry sawing or grinding of crystalline silica-containing stone products will result in the release of respirable crystalline silica. Prolonged exposure to respirable crystalline silica may cause delayed (chronic) lung injury (silicosis). Acute or rapidly developing silicosis may occur in a short period of time under heavy exposure. Silicosis is a form of disabling pulmonary fibrosis which can be progressive and may lead to death. Long-term exposure to respirable crystalline silica results in a significant risk of developing silicosis and other non-malignant respiratory disease, lung cancer, kidney effects, and immune system effects.

Toxicity Data (LD50 / LC50)

Material	Test	Result
Quartz (14808-60-7)	LD50 Oral Rat	> 5,000 mg/kg
Quartz (14808-60-7)	LD50 Dermal Rat	> 5,000 mg/kg
Titanium Dioxide (13463-67-7)	LD50 Oral Rat	> 10,000 mg/ kg

12. ECOLOGICAL INFORMATION

The ecotoxicity of the product is anticipated to be minimal, given its insolubility in water. Ultra Quartz slabs are free from exotoxins, and thanks to its unique physical and chemical properties, it does not support the growth of microorganisms or mould on the stone's surface.

- Environmental Impact: No significant ecological risk when disposed of properly.
- Persistence and Degradability: Inert and non-biodegradable.
- Bioaccumulation Potential: None.
- Mobility in Soil/Water: Not mobile in solid slab form.

Ultra Quartz slabs in their intact and finished form have no reports of acute or chronic effects.

13. Disposal Considerations

Preferred options for disposal should be (1) recycling, (2) incineration with energy recovery, and (3) landfill.

More:

- Follow all applicable local, state, and federal waste regulations.
- Do not dump dust or slurry into open drains or water systems.
- Dispose of fabrication debris as industrial waste.

14. TRANSPORT INFORMATION

The shipping descriptions provided are based on assumptions made at the time this SDS was prepared and may vary depending on factors that were not known or considered at the time of issuance.

Regulation	Status
U.S. DOT (In Accordance with DOT)	Not regulated for transport
D.O.T. Shipping Name	Ultra Quartz Slabs
Hazard Class	Not Regulated
ID Number	Not Regulated
Label / Placard	None
IMDG – Maritime	Not regulated for transport
IATA – Air	Not regulated for transport
Hazardous Substance/RQ	Not applicable

15. REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS:

SARA Title III16 Hazard Classes:

- Reactive Hazard: No
- Fire Hazard: No
- Release of Pressure: No
- Acute Health Hazard: No
- Chronic Health Hazard: Yes

U.S. TSCA INVENTORY (TOXIC SUBSTANCES CONTROL ACT)

- Quartz (14808-60-7) – Listed on United States TSCA Inventory
- Cristobalite (14464-46-1) – Listed on United States TSCA Inventory
- Titanium Dioxide (13463-67-7) – Listed on United States TSCA Inventory

REFERENCED FEDERAL STANDARDS

- OSHA Hazard Communication Standard – 29 CFR 1910.1200
- OSHA Respirable Crystalline Silica Standard – 29 CFR 1910.1053
- OSHA Respiratory Protection Standard – 29 CFR 1910.134
- GHS / Federal Register Vol. 77, No. 58 / March 26, 2012

U.S. STATE REGULATIONS:

California Prop 65 List: Crystalline silica is classified as a substance known to the State of California to be a carcinogen. Crystalline silica is on the Right-to-Know substance lists for New Jersey, Massachusetts, and Pennsylvania. For more information go to www.P65Warnings.ca.gov.

Chemical Name (CAS No.)	Carcinogenicity	Developmental Toxicity	Reproductive Toxicity
Quartz (14808-60-7)	Yes	No	No
Cristobalite (14464-46-1)	Yes	No	No
Titanium Dioxide (13463-67-7)	Yes	No	No

16. OTHER INFORMATION

This MSDS prepared by Ultra Stones LLC is intended to provide guidance on safe handling, use, and storage of Ultra Quartz surfaces. The information is based on our current knowledge but does not constitute a warranty, express or implied.

This MSDS is not intended to recommend the use of any product in a way that violates applicable laws, safety standards, or existing patents. It is the responsibility of the product recipient to ensure compliance with all relevant regulations. The information provided does not constitute a guarantee of specific properties nor does it create any contractual obligation.

Contact at: info@ultrastones.com if you have any queries.