

SAFETY DATA SHEET (SDS)

FORM QUARTZ SURFACES

WALKER
ZANGER

Safety Data Sheet (SDS)

OSHA Hazard Communication Standard 29 CFR 1910.1200.

Section 1: Identification

Product Name: Quartz slabs, pre-fabricated countertops and cut-to-size countertops

Synonyms: NA

Product Use Description: Surfacing material for interior application

Company: Walker Zanger

Section 2: Hazard(s) Identification

This product is a chemically inert, non-combustible mixture of inorganic minerals including crystalline silica and polyester resins and pigments.

Signal word: **Danger**

Hazard statements:

May cause cancer if inhaled (contains crystalline silica)

Causes damage to lungs through prolonged or repeated exposure if inhaled.

May cause respiratory irritation

Pictogram and Symbol :



Quartz slab surfaces do not emit silica dust. However, operations such as sawing, grinding, routing, drilling and sanding can generate dust. Do not breathe high concentrations of dust. May cause delayed lung injury. Long term exposure can cause silicosis. Silicosis is a respiratory disease, which can result in delayed, disabling and sometimes fatal lung injury. IARC and NTP have determined that crystalline silica inhaled from occupational sources can cause lung cancer in humans. Risk of injury is dependent on the duration and level of exposure. A single exposure will not result in serious adverse effects. Dust can cause skin and respiratory tract irritation and eye damage.

Precautionary statements:

[Prevention]

Do not breathe dust

Wear eye protection

Do not eat, drink or smoke when using this product

Wash hands and forearms thoroughly after handling
Do not handle until all safety precautions have been read and understood

[Response]

IF ON SKIN: Wash with plenty of soap and water.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing with an eye wash/safety shower for 15 minutes. Immediately call a doctor/physician.

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

If skin irritation occurs: Get medical advice/attention.

Take off contaminated clothing and wash before reuse.

Get medical attention if you feel unwell

[Disposal]

Dispose of contents/container in accordance with local/regional/ national/international regulations.

GHS Classification:

Carcinogenicity: Category 1 (lung)

Specific target organ toxicity - Single exposure: Category 3 (respiratory system)

Specific target organ toxicity - Repeated exposure: Category 1(lung)

Skin Irritation: Category 3

Section 3: Composition/information on Ingredients

Name	CAS #	EC number	Percent Weight
Silica quartz	14808-60-7	231-545-4	>88
Polyester resins and pigments	NA	NA	<12

Section 4: First-Aid Measures

Inhalation: Short-term exposure to high concentrations of dust may be irritating to the membranes of the upper respiratory tract. Remove person from exposure area to fresh air.

Skin contact: Prolonged exposure to dust on the skin may be irritating and may cause discomfort in susceptible individuals. Wash with soap and water.

Eye Contact: Flush eyes with lukewarm water, while lifting eye lids.

Ingestion: Do not ingest material. Ingesting a small quantity of dust is not known to be harmful. Large quantities may distress the digestive tract.

Section 5: Fire-fighting Measures

Flash point: Not applicable.

Flammable Limits: Not applicable.

Extinguishing Media: Use fine water mist or dry chemical

Special Firefighting Procedures: Avoid conditions that generate significant quantities of airborne dust.

Unusual Fire Hazards: Decomposition products from degradation of polymer and pigments at elevated temperatures may produce hydrocarbons, carbon dioxide, carbon monoxide and water.

Recommended PPE: Use NIOSH-approved filtering face piece respirator or higher levels of respiratory protection as indicated for particulates if there is a potential to exceed the exposure limits.

Section 6: Accidental Release Measures

Personal Precautions: Use NIOSH-approved filtering face piece respirator (dust mask) and dust goggles in accordance with regulatory requirements if dust exposure limits are exceeded.

Environmental Precautions: Avoid generating dusty conditions.

Methods for containment/cleaning up: Dust maybe vacuumed or shoveled after light wetting for recovery or disposal.

Section 7: Handling and Storage

The product should be made, fabricated and installed using wet production methods to minimize dust

Precautions for Safe Handling:

Avoid creating or spreading dust. Use adequate ventilation system in fabrication work areas to minimize dust and powder. Installers should use vacuum cleaning equipment and wet methods to minimize dust. Wash hands immediately after handling. Do not eat, drink or smoke in areas where product is used.

Precautions for Safe Storage:

Secure properly when placing slabs on rack or A-frame.

- Do not place more than 20 slabs on rack or A-frame
- Do not place more than 20 pre-fabricated countertops on rack or A-frame

Do not store slabs outside. Minimize slab exposure to sun and rain.

Section 8: Exposure Controls/ Personal Protective

Exposure Limits:

Name	Agency	Exposure Limits
Silica quartz	California PEL	0.1 mg/m ³ respirable fraction
	OSHA PEL	respirable = $\frac{10 \text{ mg/m}^3}{\% \text{ silica} + 2}$
	ACGIH TLV	0.025 mg/m ³ respirable fraction
	NIOSH REL	0.05 mg/ m ³ respirable fraction

PEL: OSHA 8-hour time weighted average Permissible Exposure Limit.

TLV: American Conference of Governmental Industrial Hygienists (ACGIH) 8-hour time weighted average Threshold Limit Value.

REL: National Institute for Occupational Safety and Health (NIOSH) 10-hour time weighted average Recommended Exposure Limit.

Personal Protective Equipment:

Use safety goggles, face and neck protection and dust masks during cutting, sanding and polishing

RESPIRATORY PROTECTION: Use NIOSH-approved filtering face piece respirator or higher levels of respiratory protection as indicated for particulates if there is a potential to exceed the exposure limits or for symptom relief or worker comfort. Respiratory protection is selected based on a hazard assessment of the work location, including the concentration of the agents, and the permissible exposure limit (PEL). Selection must be done following the requirements in OSHA’s Respiratory Protection Standard, 29CFR1910.134(d) in order to obtain adequate protection from the respirators. Employees must be qualified to use a respirator, and all respirators must be certified by NIOSH.

EYE PROTECTION: Use safety goggles in areas of high levels of airborne dust. Eye wash facilities should be available in case of eye exposure.

SKIN PROTECTION: Use cloth, canvas or leather gloves when handling the dry dust to minimize potential mechanical irritation. Protective clothing with long sleeves or disposable outer garments may be desirable in dusty areas. The use of barrier cream may prevent skin irritation in susceptible individuals.

WORK PRACTICES: Do not use compressed air to remove dust. Dampen dust with water and carefully sweep or vacuum areas where dust has settled to avoid excessive accumulation.

Ventilation: Use dust extraction equipment and dust vacuum cleaning equipment during cutting, sanding and polishing.

Section 9: Physical and Chemical Properties

Appearance: multi-colored engineered quartz stone .

Odor and Odor Threshold: not determined.

pH range: not applicable

Melting/Freezing Point: not applicable.

Boiling Point: not applicable.

Flash Point: none.

Evaporation Rate: not applicable.

Upper/lower flammability limits: none.

Vapor pressure: not applicable.

Density: ¾ inch thickness = 151.95 lb/ft²

Relative density: not applicable.

Solubility in water: not applicable

Moisture absorption: 0.06%

Viscosity: none; solid.

Section 10: Stability and Reactivity

Reactivity: Quartz slabs are stable under most conditions.

Chemical Stability: Avoid contact with hydrofluoric acid

Hazardous decomposition: Upon decomposition, polymer and pigments may produce hydrocarbons, carbon dioxide, carbon monoxide and water.

Polymerization: none.

Section 11: Toxicological Information

Exposure Routes: Inhalation of dust, and contact with skin; avoid ingestion. Prolonged inhalation may cause chronic bronchitis and fibrosis/silicosis. Silicosis is chronic disease characterized by pulmonary fibrosis and formation of silicon-containing scar tissue in the lungs. Symptoms include coughing, dyspnea, wheezing, and nonspecific respiratory ailments.

Acute Inhalation Hazards: May cause respiratory tract irritation resulting in coughing, wheezing and difficult breathing.

Chronic Inhalation Hazards: Causes damage to lung/respiratory system through prolonged or repeated exposure.

Skin contact: Prolonged exposure to dust on the skin may be irritating and may cause discomfort in susceptible individuals.

Eye Contact: Eye contact can cause severe mechanical irritation

Acute Toxicity Data: Silica quartz: not classified

Carcinogenicity: Silica quartz: carcinogenic to humans (IARC Group 1)

Reproductive Toxicity: Silica Quartz: not classified

Section 12: Ecological Information

Environmental Fate: No available information.

Environmental Toxicity: No information available at this time. Crystalline silica (quartz) is not known to be ecotoxic; i.e., no data suggests that crystalline silica (quartz) is toxic to birds, fish, invertebrates, microorganisms or plants.

Section 13: Disposal Considerations

It is the user's responsibility to determine at time of disposal whether the product meets EPA and State hazardous waste criteria. Preferred options for disposal include 1) recycling, 2) incineration with energy recovery and 3) landfill. Processing, use, or contamination of this product may change the waste management options. Follow applicable federal, state, and local regulations.

Section 14: Transport Information

Not regulated as a hazardous material by the U.S. Department of Transportation

Shipping name: not applicable

Hazard class: not applicable

Section 15: Regulatory Information

RCRA: Crystalline silica (quartz) is not classified as a hazardous waste under the Resource Conservation and Recovery Act, or its regulations, 40 CFR §261 et seq.

CERCLA: Crystalline silica (quartz) is not classified as a hazardous substance under regulations of the Comprehensive Environmental Response Compensation and Liability Act (CERCLA), 40 CFR §302.

TSCA: Crystalline silica (quartz) appears on the EPA TSCA inventory under the CAS No. 14808-60-7.

OSHA: Silica is classified as hazardous under Occupational Safety and Health Administration (OSHA) regulations (29 CFR 1910.1200).

California Proposition 65: Silica is known to the state of California to cause cancer.

Emergency Planning and Community Right to Know Act (SARA Title III): Crystalline silica (quartz) is not an extremely hazardous substance under Section 302 and is not a toxic chemical subject to the requirements of Section 313.

Date Prepared: October 014.

Date Revised: not applicable.

Prepared by: Walker Zanger

User's Responsibility: The information contained in this SDS is based on readily available information in the scientific literature that is believed to be accurate or otherwise technically correct and on the experience of occupational health and safety professionals. It is the user's responsibility to determine if the product is suitable for its proposed application(s) and to follow the necessary safety and handling precautions.

Section 16: Technical Properties

Durability	
Mohs Hardness Scale	Quartz = 7 Diamond = 10 (highest)
Impact Resistance	No fracture
High Temperature Resistance	No effect
Cigarette Test	Pass

Strength	
Flexural Strength	4,382 psi (308.1 kg/cm)
Compressive Strength	30,400 psi (2,137.8 kg/cm)

Stain Resistance	
Stain Resistance	No effect
Wear and Cleanability	Pass
Resistance to Fungi and Bacteria	No traces of growth

Chemical Resistance	
Resistance to Household Chemicals	Pass
Resistance to Chemical Substances	Not affected

Safety and Health	
Surface Burning	Class A rated
Volatile Organic Compounds (V OCs)	7.01 mg/kg
Benzene Toluene Ethylbenzene Xylene (BTEX)	Benzene and Xylene = Not detected Toluene = 5.45 mg/kg Ethylbenzene = 1.20 mg/kg
Styrene	Not detected

Form Quartz testing is performed by SGS Testing Company – a US independent laboratory. Testing represents average results. Results may vary for different Form Quartz series. For more details, please refer to Form Quartz Technical Specifications.