



## Section 3.2 – Potential Health Effects

**Primary Routes of Exposure:** None for intact tile. Inhalation and potential eye exposure to eyes, hands, or other body parts if contact is made with broken, and/or during procedures involving dry cutting (not recommended) of tiles, and/or for operations involving the removal of installed tiles.

**Symptoms of Overexposure (by route):**

**Inhalation:** Mild irritation of nose and throat.

**Eye Contact:** Mild irritation of eyes.

**Acute Effects:** No acute effects from exposure to intact tile are known. Working with broken or cut tile produces a potential for cuts to the hands and exposed body parts. Acute effects such as eye irritation may occur if associated with high dust operations such as dry cutting tile or during the removal of tile surfaces. In very rare cases, symptoms of acute silicosis, a form of silicosis (a nodular pulmonary fibrosis) associated with exposure to respirable crystalline silica, may develop following acute exposure to extremely dusty environments generated from tile dust. Signs such as labored breathing and early fatigue may indicate silicosis; however, these symptoms can arise from many other causes.

**Chronic Effects:** No chronic effects are known for exposure to intact tile. Long-term, continual exposure to respirable crystalline silica at or above allowable occupational exposure limits may lead to the development of silicosis (a nodular pulmonary fibrosis), and are associated with pulmonary tuberculosis, bronchitis, emphysema, and other airway diseases. This type of exposure may also be related to the development of autoimmune disorders, chronic renal disease, and other adverse health effects. Recent epidemiologic studies demonstrate that workers exposed to elevated silica concentrations have a significant risk of developing chronic silicosis. Signs such as labored breathing and early fatigue may indicate silicosis; however, these symptoms can arise from many other causes.

**Potential Adverse Interactions:** Silicosis may be complicated by severe mycobacterial or fungal infections and result in tuberculosis (TB). Epidemiologic studies have established that silicosis is a risk factor for developing TB. Any existing respiratory or pulmonary diseases may be complicated by exposure to respirable crystalline silica. Smoking may increase the risk of adverse effects if done in conjunction with occupational exposure to silica at or above allowable limits.

**Carcinogen Status:** Respirable crystalline silica is classified by the International Agency for Research on Cancer (IARC) as a Group I Carcinogen (carcinogenic to humans). The National Toxicology Program (9th Report) lists respirable crystalline silica as Known to be a Human Carcinogen. USDOL/OSHA and NIOSH have recommended that crystalline silica be considered a potential occupational carcinogen.

## Section 4 - First Aid Measures

**Eye Exposure:** Immediately and thoroughly flush eyes with water for 10-15 minutes while holding eyelids open. Contact physician if irritation persists.

**Inhalation:** Remove victim to fresh air and provide oxygen if breathing is difficult. Administer artificial respiration if breathing has stopped. Keep victim at rest. Call for prompt medical attention. Contact physician if breathing difficulty persists.

**Skin:** Wash thoroughly after working with tiles.

Have emergency eyewash station available in area where tiles are cut.

## Section 5 - Fire Fighting Measures

**Non-flammable**

**Extinguishing Media:** NA

**Unusual Fire or Explosion Hazards:** NA

**Recommended Fire-Fighting Procedures:** NA

## Section 6 - Accidental Release Measures

**Recommended Spill / Response Procedures:**

**Spills:** Clean up and collect spilled material. Use wet sweeping compound or water to minimize particulates.

## Section 7 - Handling and Storage

**Storage Requirements:** Store in a dry area at ambient temperature. Implement adequate exhaust ventilation where necessary. Where particulates cannot be controlled in this way, a NIOSH approved respirator should be employed.

**Recommended Handling Precautions:** Use of respirator and goggles is recommended where respirable particulates are present. Respirable particulates are of minimal concern as long as the material (fired tile) is not being dry cut, crushed, or otherwise broken.

## Section 8 - Exposure Controls / Personal Protection

**Ventilation:** Use adequate ventilation to keep exposure to dust below recommended exposure levels. Avoid inhalation of dust. The highest probability of silica exposure occurs during dry cutting (not recommended) or removal of installed tile. Wet cutting methods are recommended.

**Respiratory Protection:** Use a properly fitted NIOSH/MSHA approved particulate respirator if dry cutting (not recommended) is necessary or during the removal of tile surfaces.

**Eye Protection:** Use dust-proof goggles or safety glasses with side shields. Contact lenses may absorb irritants. Do not wear contact lenses in work areas.

**Skin Protection:** Cotton or leather work gloves should be worn when cutting this product to minimize skin exposure to dust and/or cuts. Wash hands prior to eating, drinking, or smoking, and at the end of the work shift, after cutting operations are conducted.

## Section 9 - Physical and Chemical Properties

**Appearance:** Solid, flat shapes any color

**Odor:** none

**Vapor Pressure:** NA

**Boiling Point:** NA

**Freezing Point:** NA

**Water Solubility:** insoluble

**Specific Gravity:** 2.4-2.7

**Flash Point:** NA

**Vapor Density (air = 1):** NA

**Melting Point:** NA >2100°F

## Section 10 - Stability and Reactivity

**Stability:** Stable

**Polymerization:** Will not occur

**Chemical Incompatibilities:** (Materials to Avoid): Avoid contact with acids (e.g., acetic, hydrofluoric, etc.)

**Hazardous Products of Decomposition:** none

## Section 11 - Ecological Information

No harmful effects known other than those associated with suspended inert solids in water.

## Section 12 - Disposal Considerations

**EPA Waste Codes:** If this material becomes a waste, it shall be designated as solid waste according to EPA and disposed of by the following methods or technologies.

**Recommended Disposal Methods/Technologies:** A disposal method should be selected based upon environmental acceptability in the following order of preference:

- 1) Recycle or rework if feasible.
- 2) Landfill at an approved facility.

Contact the appropriate government environmental agencies if further disposal guidance is required.

## Section 13 - Transport Information

D.O.T. Shipping Name:	Not applicable
Hazard Class:	Non-regulated (for disposal purposes material is non-hazardous Class III regulated material)
ID Number:	Not applicable
Marking:	Not applicable
Label:	None
Placard:	None
Hazardous Substance/RQ:	Not Applicable
Shipping Description:	Porcelain Ceramic Tiles
Packaging References:	None

## Section 14 - Regulatory Information

### EPA Designations:

This product or its components meets the following hazard definition(s) as defined by the Occupational Safety and Health Hazard Communication Standard (29 CFR Section 1910.1200):

<input type="checkbox"/> Combustible Liquid	<input type="checkbox"/> Flammable Aerosol	<input type="checkbox"/> Oxidizer
<input type="checkbox"/> Compressed Gas	<input type="checkbox"/> Explosive	<input type="checkbox"/> Pyrophoric
<input type="checkbox"/> Flammable Gas	<input checked="" type="checkbox"/> Health Hazard (Sections 3 and 12)	<input type="checkbox"/> Unstable
<input type="checkbox"/> Flammable Liquid	<input type="checkbox"/> Organic Peroxide	<input type="checkbox"/> Water Reactive
<input type="checkbox"/> Flammable Solid		

Based on information presently available, this product does not meet any of the hazard definitions of 29 CFR Section 1910.1200.

**Toxic Chemical (SARA-313):** Fired Tiles are articles, and not subject to SARA 313 reporting requirements. However, tiles do contain trace concentrations of metal compounds (e.g., chromium compounds).

Title 22 Division 2, California Code of Regulation Chapter 3 (Proposition 65): This product contains a chemical or chemicals known to the State of California to cause cancer and/or birth defects or other reproductive harm.

Note: The information in this data sheet provides information related to the potential hazards associated with dusts which may be produced during cutting or otherwise changing the shape of the tile during installation and/or removal.

## Section 15 - Other Information

**Disclaimer:** While the information and recommendations set forth herein are believed to be accurate as of the date hereof, the preparer and/or manufacturer makes no warranty with respect thereto, and disclaims liability from reliance thereon. This data relates only to the specific material(s) designated herein, and does not relate to use in combination with any other material(s) or in any process. Any use of this data and information must be determined by the user to be in accordance with Federal, State, and local laws and regulations.