

Safety Data Sheet (SDS)

Section 1 - Identification

Collection	Ikonite
Product Name	
Finish	
Company /	Stonepeak Ceramics, Inc.
Manufacturer	238 Porcelain Tile Dr.
	Crossville, TN 38555
	(931) 459-2500
	stonepeakceramics.com
Emergency Assistance	Tennessee Department of Environment & Conservation (TDEC)
	1-800-891-TDEC (8832)
Recommended Use	The guidelines issued by the Environmental Protection Agency (EPA), the American Society for Testing Materials (ASTM), and the Federal Trade Commission, state that Tile is one of the most environmentally friendly building materials you can buy today.

This document conforms to the Globally Harmonized System and has been prepared in accordance with the Occupational Safety and Health Administration (OSHA) Hazard Communication standard, 29 Code of Federal Regulations (CFR) 1910.1200(g), Safety Data Sheet. See Section 16 below.

Section 2 – Hazardous Identification

Classification

Physical	Health
Not Hazardous	Carcinogen Category 1A Specific Target Organ Toxicity – Repeated Exposure Category 1



Danger

May cause cancer by inhalation.
Causes damage to the lungs through prolonged or repeated exposure by inhalation.

Response:

If exposed or concerned: Get medical advice.

Disposal:

Dispose of contents/containers in accordance with local regulations.

Prevention

Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.

Do not breathe dust.
Do not eat, drink, or smoke when using this product.
Wear protective gloves and safety glasses or goggles.
In case of inadequate ventilation, wear respiratory protection.

OSHA / HCS status

Raw material mixture in dry form is considered hazardous by the OSHA Hazard Communication Standard (HCS) 29 CFR 1910.1200.

Hazard Statements:

(H350) Cancer Hazard. Contains quartz (crystalline silica) which may cause cancer. Risk of cancer depends on duration and level of exposure to the dust. Not an acute hazard.

(H332) Prolonged inhalation of dust may cause lung injury. Inhalation of high concentrations of dust may cause mechanical irritation and discomfort of the respiratory tract. Repeated exposure may have chronic effects.

(H316 + H320 = H335) Can cause skin, respiratory, and eye irritation.

Precautionary Statements:

(P202) Do not handle until all safety precautions have been read and understood.

(P261) Avoid breathing dust.

(P264) Wash skin thoroughly after handling.

(P270) Do not eat, drink or smoke when handling this product.

(P280) Wear protective gloves, eye, and respiratory protection.

Potential Health Effects:

Inhalation: Do not breathe dust. See “Health Hazards” in Section 11 for more details.

Section 3 – Composition/Information on Ingredients

Substances / Mixtures

Hazardous Components	Components	Weight Percent	CAS No
Silica Crystalline	Cristobalite	5-13%	14646-6-1
	Quartz		14808-60-7
	Tridymite (absent)		15468-32-3

Section 4 – First Aid Measures

Eye Contact	If eye contact occurs, rinse immediately with large amounts of water for at least 15 minutes. Get medical attention if irritation persists.
Skin	If irritation occurs, wash thoroughly with water. If it persists, seek medical attention.
Inhalation	Remove to fresh air in a well-ventilated area. If coughing or irritation persists, seek medical attention.
Ingestion	Consult physician and/or obtain competent medical assistance.

Most Important Symptoms and Effects, Both Acute and Delayed

During the installation process, the cutting stage may produce breathable crystalline silica. Prolonged and / or large-scale inhalation of breathable silica dust may cause pulmonary fibrosis, commonly known as silicosis. The main symptoms of silicosis are coughing and shortness of breath. Occupational exposure to breathable crystalline silica dust must be monitored and controlled.

Section 5 – Fire Fighting Measures and Information

General Fire Hazards	Ceramic or Porcelain body in a dry or moist form is not flammable, nor supports fire.
Extinguishing Media	Use appropriate extinguishing media for surrounding fire.
Chemical Hazards from Fire	This mixture does not contain hazardous decomposition products.
Special Fire Fighting Procedures	Non required, Non-flammable
Fire and Explosion Hazards	None. This compound is not a fire or explosion hazard.

Section 6 – Accidental Release Measures

Clean up Methods

Avoid creating excessive dust. If appropriate, use gentle water spray to wet down and minimize dust generation. See Section 8 concerning PPE information for clean-up.

Section 7– Handling & Storage

Recommendations on the Conditions for Safe Storage

Use respiratory protection in the absence of effective engineering controls. No special storage considerations.

Section 8 – Exposure Controls / Personal Protection

Airborne Exposure Limits

	Wt. % Approx.	CAS#	OSHA PEL* / ACGIH TLV*
Crystalline Silica – Quartz	5-13	14808-60-7	0.1mg/m ³ / 0.025mg/m ³ respirable

Engineering Measures

Ceramic or Porcelain body in moist form poses no inhalation health risk. In fired tile, there may be dust generated by the working processes. In the event dust is generated, use local exhaust ventilation or other engineering controls as required to maintain exposures below applicable occupational exposure limits (TLV).

Personal Protective Equipment (PPE)

Respiratory

In the event of exposure levels higher than those stated above, wearing a respiratory protection device is mandatory. NIOSH/OSHA approved respirators must be worn in accordance with a respiratory program which meets OSHA requirements as set forth in 29 CFR1910.134 and ANSI Z88.2-1080 “Practices for Respiratory Protection”. Use of proper PPE is still always recommended during tile cutting, grinding and removing stages.

Eyes

Use of NIOSH/OSHA approved safety glasses with side shields is recommended. Wear tight fitting dust goggles when excessively (visible) dusty conditions are present or are anticipated. NIOSH recommends that contact lenses not be worn when working with crystalline silica dust.

Skin and Body

Protective clothing is not essential. Use gloves and/or protective clothing if abrasion or allergic reactions are experienced. Wash hands prior to eating, drinking or smoking and at the end of the work shift.

Section 9 – Physical & Chemical Properties

Appearance (physical state, color, etc.)

Oder: Odorless	
Melting point/freezing point: 2930 F/1610 C	Boiling point range: 4046 F/2230 C
Flash point: Not applicable	Evaporation rate: Not applicable
Flammable limits: LEL: Not applicable	UEL: Not applicable
Vapor pressure: Not applicable	Vapor density: Not applicable
Relative density: 2.33	Solubilities: body components insoluble in water
Partition coefficient: n-octanol/water: Not applicable	Auto-ignition temperature: Not determined
Decomposition temperature: Not determined	Viscosity: Not applicable
Flammability (solid, gas): Not applicable	

Section 10 – Stability & Reactivity

Reactivity	No dangerous reactions are known under normal conditions of use.
Chemical Stability	No stabilizers required to maintain chemical stability.
Hazardous polymerization	Will not occur.

Section 11 – Toxicological Information

Potential Health Effect

Primary Route of Exposure: Skin, eye contact, inhalation and ingestion

Specific Organ Toxicity – Single Exposure: Target organs include ears, skin, respiratory system, and gastrointestinal tract.

Specific Organ Toxicity – Repeated Exposure: Causes damage to eyes, skin, respiratory system and gastrointestinal tract though prolonged or repeated exposure.

Acute Short – Term Exposure Effects: May cause eye irritation, respiratory tract irritation, and gastrointestinal tract irritation. Inhalation of high concentrations of dry dust may cause mechanical irritation and discomfort. Long term exposure may cause chronic effects.

Chronic Long Term Effects: Silica has been classified by OSHA as a human lung carcinogen. Repeated or prolonged exposure of respirable crystalline silica dust may cause lung damage in the form of silicosis.

Effects of silicosis include bronchitis/chronic obstructive pulmonary disorder, increased susceptibility to tuberculosis, scleroderma (a disease affecting skin, blood vessels, joints and skeletal muscles), and possible renal disease. Acute silicosis can be fatal.

Related Symptoms: Symptoms will include shortness of breath, fever, fatigue, loss of appetite, chest pain and a dry non-productive cough.

Medical Conditions Aggravated by Exposure: Individuals with pre-existing allergies, eye disorders, skin disorders, respiratory disorders and/or gastrointestinal disorders may have increased susceptibility to the effects of exposure.

Potential Adverse Interactions

Silicosis may be complicated by severe mycobacterial or fungal infections and result in tuberculosis (TB). Epidemiological 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 executed in conjunction with occupational exposure to silica dust at or above permissible exposure limits.

Carcinogen Status

Respirable crystalline silica is classified by the International Agency of 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.

Overview of Animal Testing: Short-term experimental studies of rats have found that intratracheal instillation of quartz particles leads to the formation of discrete silicotic nodules in rats, mice and hamster.

Oral (silica) Lethality

LD50 Rat oral	>22,500 mg/kg
LD50 Mouse oral	>15,000 mg/kg
LC50 Carp	>10,000 mg/l (per 72 hr.)

Section 12 – Ecological Information

No information available at this time.

Section 13 – Disposal Considerations

Personal Protection	Refer to section 8 for proper PPE when disposing of waste material.
Appropriate Disposal Containers	Standard waste disposal containers – no special requirements.
Appropriate Disposal Methods	Disposal for this product should comply with the requirements of environmental protection and waste disposal legislation and any regional or local authority requirements.
Sewage Disposal	Do not dispose of into sinks or toilets. Never dispose of this product into a sewer system.
Special Precautions for Landfills or Incineration Activities	There are no special precautions for disposal in a landfill. This product is non-combustible and is not suitable for incineration.

Section 14 – Transportation Information

Regulatory Information

DOT Classification Not regulated

TDG Classification Not regulated

ARD/RID Class Not regulated

IMDG Class Not regulated

IATA-DGR Class Not regulated

Not regulated for transportation under the IATA/CAO, IMDG, EU ADR, or Canadian TDG Regulation.

Section 15 – Regulatory Information

TSCA – Toxic Substances Control Act – EPA

Quartz and other chemicals are listed in the TSCA Chemical Substance Inventory.

California Proposition 65 Warning

 **WARNING:** This product can expose you to chemicals including crystalline silica (airborne particles of respirable size) which are known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov. (Prop. 65 – California Health and Safety Code Section 2549).

SARA / Title III Emergency Planning & Community Right-to-Know Act

This product contains no substances at or above the reporting threshold under Section 313, based on available data.

Section 16 – Other Information

Definitions

ACGIH	American Conference of Governmental Industrial Hygienists
CAS	Chemical Abstract Service
CAL-OSHA	California Occupational Safety & Health Administration
IARC	International Agency for Research on Cancer
OSHA	Occupational Safety & Health Administration
MSHA	Mine Safety and Health Administration
NIOSH	National Institute of Occupational Safety and Health
NTP	National Toxicology Program
HCS	Hazardous communication standard
OSHA PEL	OSHA permissible exposure limit
STEL	Short-term exposure limit
TLV	Threshold Limit Value
TWA	Time Weighted Average

Three types of TLVs for chemical substances as defined by the ACGIH are as:

TLV-TWA	Timeweight average – average exposure on the basis of an 8 hour day, 40h/week work schedule.
TLV-STEL	Short-term exposure limit – spot exposure for a duration of 15 minute, that cannot be repeated more than 4 times per day, with at least 60 minutes between exposure periods.
TLV-C	Ceiling limit – absolute exposure limit that should not be exceeded at any time.

This SDS complies with the Globally Harmonized System of Classification and Labeling of Chemicals (GHS) and is subject to revision at any time without notice.

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