

SAFETY DATA SHEET (Complies with OSHA 29 CFR 1910.1200)

SECTION I: PRODUCT IDENTIFICATION

Keystone Hardscapes[®]
5 Concourse Parkway, Suite 1900
Atlanta, GA 30328

Emergency Telephone Number INFOTRAC (800) 535-5053

Information Telephone Number (800) 282-5828

SDS KS1

The most recent version of this document can be found at www.keystonehardscapes.com

Product Name: Pavers, Patio Stones, Masonry, Retaining Walls

Product Use: Manufactured products for general construction.

SECTION II - HAZARD IDENTIFICATION

Hazard-determining components of labeling: Non-hazardous during intended use. Sanding/grinding or fracturing units may release particles containing Silica. Hazards identified are for airborne silica particles and dust released during cutting, grinding or sanding.

Hazard-determining components of labeling: Silica 2.1 Classification of the substance or mixture

Carcinogen – Category 1A Specific Target Organ Toxicity Single Exposure – Category 3 Specific Target Organ Toxicity Repeat Exposure – Category 1 Eye Irritant – Category 2B

2.2a Signal word DANGER!

2.2b Hazard Statements

May cause cancer through chronic inhalation.

May cause respiratory irritation.

Causes damage to lungs through prolonged or repeated inhalation.

Causes eye irritation if particles or dust get in eye.



2.2c Pictograms



2.2d Precautionary statements

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

Wear protective gloves, eye protection, and protective clothing.

Do not eat, drink or smoke when using this product.

Wash thoroughly after handling.

Use only in a well-ventilated area.

Do not breathe dust.

If inhaled: Remove person to fresh air and keep comfortable for breathing. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Immediately seek medical advice or attention if symptoms are significant or persist.

Dispose of contents/containers in accordance with all regulations.

2.3 Additional Information

Under normal conditions of handling and use, dust exposures from concrete masonry products should be minimal. Finishing processes such as cutting, grinding or sanding, may release particles and dust containing:

Sand, Silica, Quartz (CAS 14808-60-7)

Limestone (CAS 1317-65-3)

Portland Cement (CAS 65997-15-1) or

Fly Ash (CAS 68131-74-8)

Particles of these products that become released, which are smaller than 40 microns in size and become airborne (respirable) constitute the respiration hazards identified. All of the other hazards are mechanical in nature.

2.3a HNOC – Hazards not otherwise classified: Not applicable

2.3b Unknown Acute Toxicity: None

SECTION III - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION			
Hazardous Components	CAS No.	% by Weight	
Sand, Silica, Quartz	14808-60-7	80 -100	
Non-hazardous binder*	N/A	10 - 20	



*The non-hazardous binder is composed of hardened portland cement and may include fly ash and other materials typical in pre-cast concrete products. This hardened binder does not contribute to the hazards for this product during use.

SECTION IV - FIRST AID MEASURES

4.1 Description of the first-aid measures

General information:

After inhalation: Remove person to fresh air and keep comfortable for breathing.

After skin contact: Rinse skin with water.

After eye contact: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing.

After swallowing: If conscious, have the victim drink plenty of water and call a physician immediately. Do not induce vomiting. Never give anything by mouth to an unconscious person.

4.2 Most important symptoms/effects, acute and delayed

Under normal conditions of handling and use, dust exposures from concrete masonry products should be minimal. Finishing processes such as cutting, grinding or sanding, may release particles and dust.

Inhalation: May cause respiratory tract irritation. Causes damage to organs through prolonged or repeated inhalation. This product contains crystalline silica. Prolonged or repeated inhalation of respirable silica from this product can cause silicosis.

Skin contact: Causes mechanical skin irritation.

Eye Contact: Causes eye irritation if particles or dust get in eye.

Ingestion: Ingestion of large quantities may cause discomfort and/or distress,

nausea or vomiting.

4.3 Indication of immediate medical attention and special treatment needed: Immediately seek medical advice or attention if symptoms are significant or persist.

SECTION V - FIRE FIGHTING MEASURES

- **5.1 Flammability of the Product:** Non-flammable and non-combustible
- **5.2 Suitable extinguishing agents:** Treat for surrounding material
- 5.3 Special hazards arising from the substance or mixture: None
- 5.3a Products of Combustion: None
- **5.3b Explosion Hazards in Presence of Various Substances:** Non-explosive in presence of shocks



SECTION VI - ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures: Wear personal protective equipment (See section VIII). Keep unprotected persons away.

6.2 Methods and material for containment and cleaning up:

Dispose of unwanted materials and containers properly in accordance with all regulations.

SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND STORAGE

7.1 Handling Precautions for safe handling:

Ensure good ventilation/exhaustion at the workplace. DO NOT BREATHE DUST. In dusty environments, the use of an OSHA, MSHA or NIOSH approved respirator and tight fitting goggles is recommended. Wear appropriate PPE (See section 8). Do not get in eyes, on skin or clothing. Good housekeeping is important to prevent accumulation of dust.

7.2 Storage Requirements to be met by storerooms and receptacles: No special requirements.

Information about storage in one common storage facility: Not required.

SECTION VIII – EXPOSURE CONTROL MEASURES / PERSONAL PROTECTION

8.1 Components with limit values that require monitoring at the workplace:

Hazardous Components CAS No. PEL (OSHA) TLV (ACGIH)

 mg/M^3 mg/M^3

Silica Sand, crystalline 14808-60-7 0.05 0.025 (resp)

8.2 Exposure Controls

Use ventilation adequate to keep exposures below recommended exposure limits.

8.3 General protective and hygienic measures

Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work. Avoid contact with the eyes and skin.

8.3a Personal protective equipment Protection of hands:

Wear gloves of adequate length to offer appropriate skin protection from incidental contact. General duty work gloves have been found to offer adequate protection for most intended uses.



Eve protection:

Wear approved eye protection properly fitted dust- proof chemical safety glasses.

Respiratory protection:

A NIOSH-approved dust mask, such as N95 respirator (mask), or filtering face piece is recommended in poorly ventilated areas or when permissible exposure limits may be exceeded. Respirators should be selected by and used under the direction of a trained health and safety professional, following requirements found in OSHA's respirator standard (29 CFR 1910.134) and ANSI's standard for respiratory protection (Z88.2).

SECTION IX - PHYSICAL/CHEMICAL CHARACTERISTICS

General Information

Appearance Form: Granular Solid

Color: Varies Odor: None

pH-value at 20°C (68 °F): Not applicable Boiling point/Boiling range: Not applicable Flash point: Not applicable

Auto igniting: Product is not self-igniting

Vapor pressure at 21°C (70°F) Not applicable

Density at 25°C (77 °F): 2.5-2.8

Solubility in / Miscibility with

Water: Insoluble VOC content: 0 g/L VOC

SECTION X - STABILITY AND REACTIVITY

10.1 Reactivity

No dangerous reaction known under conditions of normal use.

10.2 Chemical stability

Stable under normal storage conditions. Keep in dry storage.

10.3 Possibility of hazardous reaction

No dangerous reaction known under conditions of normal use.

10.4 Thermal decomposition / conditions to be avoided

No decomposition if used according to specifications.

10.5 Incompatible materials

Contact of silica with powerful oxidizing agents such as fluorine, chlorine trifluoride, manganese trioxide, or oxygen difluoride may cause fires

10.6 Hazardous Decomposition or By-products

Silica will dissolve in Hydrofluoric Acid and produce a corrosive gas – silicon tetrafluoride.



SECTION XI – TOXICOLOGICAL INFORMATION

11.1 Exposure Routes: Inhalation, skin contact, eye contact, or ingestion.

11.2 Symptoms related to physical/chemical/toxicological characteristics:

Inhalation: May cause respiratory tract irritation. Causes damage to organs through prolonged or repeated exposure. This product contains crystalline silica. Prolonged or repeated inhalation of respirable silica from this product can cause silicosis.

Skin contact: May cause mechanical skin irritation.

Eye Contact: Causes eye irritation if particles or dust gets in eye. **Ingestion:** Ingestion of large quantities may cause discomfort and/or

distress.

11.3 Delayed, immediate and chronic effects of short-term and long-term exposure

Short Term

Skin Corrosion/Irritation: Not applicable

Serious Eye Damage/Irritation: Causes eye irritation if particles or dust

gets in eye

Respiratory Sensitization: Not applicable

Skin Sensitization: Not applicable

Specific Target Organ Toxicity-Single Exposure: (Category 3) May cause

respiratory irritation

Aspiration Hazard: Not applicable

Long Term

Carcinogenicity: May cause cancer through chronic inhalation.

Germ Cell Mutagenicity: Not applicable Reproductive Toxicity: Not applicable

Specific Target Organ Toxicity- Repeated Exposure: (Category 1) Causes

damage to lungs through prolonged/repeated exposure

Synergistic/Antagonistic Effects: Not applicable

SECTION XII - ECOLOGICAL INFORMATION

12.1 Ecotoxicity

No further relevant information available.

12.2 Persistence and degradability

No further relevant information available.

12.3 Bioaccumulative potential:

No further relevant information available.



12.4 Mobility in soil

No further relevant information available.

12.5 Other Adverse Effects

No further relevant information available.

SECTION XIII - DISPOSAL CONSIDERATIONS

13.1 Waste Disposal Method

The packaging and material may be land filled; however, material should be covered to minimize generation of airborne dust. This product is <u>not</u> classified as a hazardous waste under the authority of the RCRA (40CFR 261) or CERCLA (40CFR 117&302). Disposal must be made in accordance with local, state and federal regulations.

SECTION XIV - TRANSPORT INFORMATION			
	DOT (U.S.)	TDG	
(Canada)			
UN-Number	Not Regulated	Not	
Regulated			
UN proper shipping name	Not Regulated	Not	
Regulated			
Transport Hazard Class(es)	Not Regulated	Not	
Regulated			
Packing Group (if applicable)	Not Regulated	Not	
Regulated			

14.1 Environmental hazards:

Not applicable

14.2 Transport in bulk according to Annex II of Marpol 73/78 and the IBC Code

Not applicable

14.3 Special precautions for user

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

SECTION XV - OTHER REGULATORY INFORMATION

15.1 Safety, Health and Environmental Regulations/Legislations specific for the chemical

Canada

WHMIS Classification: Considered to be nonhazardous material under the Hazardous Products Act as defined by the Controlled Products Regulations and subject to the requirements of Health Canada's



Workplace Hazardous Material Information (WHMIS). This document complies with the WHMIS requirements of the Hazardous Products Act (HPA) and the CPR.

15.2 US Federal Information

SARA 302/311/312/313 Components

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302, 311, 312 or 313.

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.

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.

FDA: Silica is included in the list of substances that may be included in coatings used in food contact surfaces, 21 CFR §175.300(b)(3)(xxvi). **NTP:** Respirable crystalline silica, primarily quartz dusts occurring in industrial and occupational settings, is classified as Known to be a Human

OSHA Carcinogen: Crystalline silica (quartz) is not listed.

15.3 State Right to Know Laws

Carcinogen.

Non-hazardous during intended use. Cutting, sanding, grinding or fracturing units may release particles containing Silica. Hazards identified are for airborne silica particles and dust released during these operations.

California Prop. 65 Components

WARNING: This product can expose you to crystalline silica which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

California Inhalation Reference Exposure Level (REL): California established a chronic REL of 3 µg for silica (crystalline, respirable). A chronic REL is an airborne level of a substance at or below which no adverse health effects are anticipated in individuals indefinitely exposed to the substance at that level.



Massachusetts Toxic Use Reduction Act: Silica, crystalline (respirable size, <10 microns) is "toxic" for purposes of the Massachusetts Toxic Use Reduction Act.

15.4 Global Inventories

DSL All components of this product are on the Canadian DSL list. **TSCA No.:** Crystalline silica (quartz) appears on the EPA TSCA inventory under the CAS No. 14808-60-7. All constituents are listed in the TSCA inventory.

SECTION XVI – OTHER INFORMATION

Last Updated: June 18, 2019

NOTE: The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, express or implied, is made with respect to the information contained herein. We accept no responsibility and disclaim all liability for any harmful effects which may be caused by exposure to silica contained in our products.

Prepared by Keystone Hardscapes®

www.keystonehardscapes.com

End of SDS