

Precast Concrete, pavers, caps, copings, stairtreads and tiles

SECTION 1: IDENTIFICATION

PRODUCT NAME: Borderstone, Classic Garden Step, Classic Pilaster Cap, Classic Riser Tile, Classic Wall Cap, Classic Walks, Del Rio Pavers, Modern Garden Step, Narrow Modular Pavers, Pool Coping, Riser Landings, Sonorastone, Sonorastone Pilaster Cap, Sonorastone Wall Cap, Stair Treads




SYNONYMS: precast concrete, hardened concrete, hardened cement with aggregate

MANUFACTURER: Stepstone, Inc.
ADDRESS: 17025 S Main St, Gardena CA 90248

EMERGENCY PHONE: 310 217-1424

RECOMMENDED USE: construction and landscaping: wall capping, pavers, stairs

SECTION 2: HAZARD(S) IDENTIFICATION

GHS Health Hazard Classification		
Skin Irritation Hazard Category 3 H315 Signal Word: Warning Hazard Statement: Causes skin irritation Pictogram: 	Eye Irritation Hazard Category 1 H318 Signal Word: Danger Hazard Statement: Airborne particulate from cutting or demolition may cause serious eye damage. Pictogram: 	Carcinogen Hazard Category 1A H350 Signal Word: Danger Hazard Statement: May cause cancer if airborne particles from cutting or demolition are inhaled. Pictogram: 
GHS Environmental Hazard Classification	GHS Physical Hazard Classification	
Acute Aquatic Toxicity Hazard Category 3 H402 Signal Word: none Hazard Statement: harmful to aquatic life Pictogram: none	Physical Hazard Category: none Signal Word: none Hazard Statement: none Pictogram: none	

PRECAUTIONARY STATEMENTS:

Prevention:

- P202: Do not handle until all safety precautions have been read and understood.
- P264: Wash hands thoroughly after handling.
- P273: Avoid release to the environment.
- P280: Wear work gloves to handle this product, and eye protection / respiratory protection if cutting or demolishing the product.

Response:

- P302 + P352: IF ON SKIN: Wash with plenty of water.
- P305 + P351 + P338 + P313: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get immediate medical advice/attention.
- P304 + P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.
- P308 + P313: IF exposed or concerned: Get medical advice/attention.
- P332 + P313: If skin irritation occurs: Get medical advice/attention.
- P314: Get medical advice/attention if you feel unwell.
- P362 + P364: Take off contaminated clothing and wash it before reuse.

Storage:

- P402: Store in a dry place.

Disposal:

- P501: Dispose of product in accordance with local regulations as construction debris.

HAZARDS NOT OTHERWISE CLASSIFIED: none

STATEMENT ON % OF MIXTURE CONTAINING INGREDIENTS(S) WITH UNKNOWN ACUTE TOXICITY:

96% of this mixture has unknown acute toxicity.

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CHEMICAL NAME (Common Name)	CAS Number	QUANTITY Weight %
crystalline silica aggregate** (from rock) and crystalline quartz** (from sand)	14808-60-7	55-70
Portland cement (hydraulic calcium silicates)	65997-15-1	15-20
Aluminum oxide	1344-28-1	5-10
Calcium oxide	1305-78-8	0-5
Iron(II) oxide	1345-25-1	0-2
Potassium oxide	12136-45-7	0-2
Sodium oxide	1313-59-3	0-2
Iron(III) oxide	1309-37-1	0-2
Kaolin	1332-58-7	0-1
Magnesium oxide	1309-48-4	0-1

*TRADE SECRET STATEMENT: The exact concentration of composition has been withheld as a trade secret.

SECTION 4: FIRST AID MEASURES

Inhalation	Skin	Eyes	Ingestion
This is not a possible route of entry during normal use. IF INHALED: Remove person to particulate-free fresh air and keep comfortable for breathing. Get medical advice/attention if person feels unwell.	IF ON SKIN (or hair): If irritation occurs, flush skin with plenty of water. Remove contaminated clothing and shoes. Wash clothing before reuse. Get medical attention if irritation develops and persists.	This is not a possible route of entry during normal use. If in EYES: Do not rub or scratch eyes. Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing for at least 15 minutes. Get medical attention.	This is an unlikely route of exposure. IF SWALLOWED: Do Not induce vomiting unless directed to do so by medical personnel. Get medical advice/attention.
Most Important Acute Symptoms or Effects			
Sneezing, coughing, wheezing. Respiratory ailments (including bronchitis, emphysema, COPD) may be aggravated by exposure to particulate generated by cutting or demolition of this product.	Skin contact with dry hardened concrete may cause redness or other signs of irritation/abrasion. Skin contact with wet hardened concrete will cause irritation and burns.	Particulate/dusts from demolition or cutting of product may cause abrasion, irritation, redness and/or watering, swelling of the eyes. Rubbing the eyes with concrete-contaminated hands will result in serious eye irritation and possible corneal burns.	The alkaline nature of wet cured concrete may burn mouth and esophagus.
Most Important Delayed Symptoms of Effects			
Chronic exposure to dust generated from cutting, grinding, crushing, or drilling hardened concrete may cause bronchitis. Chronic inhalation of crystalline silica (from airborne concrete particulate) can cause scleroderma, silicosis and cancer.	Sensitized individuals may develop allergic dermatitis through skin contact with wet cured concrete.	Corneal abrasion Corneal burns	Ingestion of large amounts may cause gastrointestinal irritation and obstruction.

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Suitable Extinguishing Equipment	Specific Hazards that Develop from the Surrounding Fire	Protective Equipment
Use extinguishing media appropriate for surrounding fire.	This product does not ignite or support combustion. Intense heat may cause abrupt evolution of CO ₂ or trapped moisture	Use protective equipment appropriate for surrounding fire.

SECTION 6: ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS: Avoid inhalation of concrete dusts. Use work gloves to handle spilled product. Wear appropriate protective equipment as described in Section 8.

EMERGENCY PROCEDURES: Place any broken or crushed product in a container, avoiding actions that cause the concrete dust to become airborne. Do not allow spilled product to enter water ways or storm drains.

SECTION 7: HANDLING AND STORAGE

Precautions for Safe Handling	Conditions for Safe Storage
Do not handle until all safety precautions have been read and understood. Wear work gloves when handling the product. Wash hands thoroughly after handling Wear work gloves, eye protection, and respiratory protection if demolishing or cutting the product. Wear impervious gloves and eye protection if handling a wet product, or product that has been wet.	Store in a dry area. When stacking, ensure adequate load-bearing capacity of supporting platforms.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

VENTILATION and ENGINEERING CONTROLS: Not required for normal use. Dust suppression controls should be used if this product is cut or demolished. Standard construction practices should be followed to prevent dust from entering non-work areas.

RESPIRATORY PROTECTION: Not required for normal use. During demolition or cutting, NIOSH/MSHA approved dust respirators should be used where dust levels exceed or are likely to exceed exposure limits defined in this section.

EYE PROTECTION: Not required under normal use. During demolition or cutting, safety goggles should be worn.

SKIN PROTECTION: Work gloves / gardening gloves should be worn when handling this product.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: Not required for normal use. During demolition or cutting, skin and hair should be protected from dust exposure.

WORK HYGIENIC PRACTICES: Wash hands with soap and water after handling this product. Avoid dust inhalation during cutting and demolition procedures. Avoid direct contact with skin and eyes.

EXPOSURE LIMITS:

CHEMICAL NAME (common name)	CAS Number	REGULATORY		RECOMMENDED	
		OSHA PEL 8 hr TWA	Cal/OSHA PEL 8 hr TWA	NIOSH REL 10 hr TWA	ACGIH 2015 8 hr TWA
crystalline silica aggregate (from rock) and crystalline quartz (from sand) SiO ₂	14808-60-7	$\frac{30 \text{ mg}/\text{M}^3}{(\% \text{SiO}_2 + 2)} T$ $\frac{10 \text{ mg}/\text{M}^3}{(\% \text{SiO}_2 + 2)} R$	0.3 mg/m ³ T 0.1 mg/m ³ R	0.05 mg/m ³ R	0.025 mg/m ³ R
Portland cement (hydraulic calcium silicates)	65997-15-1	15 mg/m ³ T 5 mg/m ³ R	Not established	10 mg/m ³ T 5 mg/m ³ R	1 mg/m ³
Aluminum oxide Al ₂ O ₃	1344-28-1	15 mg/m ³ T 5 mg/m ³ R	10 mg/m ³ T 5 mg/m ³ R	Not Established	10 mg/m ³ T 3 mg/m ³ R

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(Exposure limits, continued)

Calcium oxide CaO	1305-78-8	5 mg/m ³	2 mg/m ³	2 mg/m ³	2 mg/m ³
Iron(II) oxide FeO	1345-25-1	10 mg/m ³ (as fume)	Not established	Not Established	Not established
Potassium oxide K ₂ O	12136-45-7	Not established	Not established	Not established	Not established
Sodium oxide NaO	1313-59-3	Not established	Not established	Not established	Not established
Iron(III) oxide Fe ₂ O ₃	1309-37-1	15 mg/m ³ T 5 mg/m ³ R	Not established	Not established	5 mg/m ³ R
Kaolin Al ₂ O ₃ • SiO ₂ • xH ₂ O	1332-58-7	15 mg/m ³ T 5 mg/m ³ R	2 mg/m ³ R	10 mg/m ³ T 5 mg/m ³ R	2 mg/m ³ R
Magnesium oxide MgO	1309-48-4	15 mg/m ³	10 mg/m ³	15 mg/m ³	10 mg/m ³

Abbreviation Key: T= Total; R = Respirable

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**APPEARANCE:** solid concrete block; color and shape vary**ODOR:** none**pH:** as supplied: not applicable; extract may be alkaline**RELATIVE DENSITY (water = 1):** 2.2-2.3**MELTING/FREEZING POINT:** not applicable**INITIAL BOILING POINT / BOILING RANGE:** not applicable**SOLUBILITY:** negligible, but water extracts unbound alkaline salts**PARTITION COEFFICIENT (n-octanol/water):**
not applicable**VISCOSITY:** not applicable**VAPOR PRESSURE:** not applicable**VAPOR DENSITY (air = 1):** not applicable**EVAPORATION RATE (butyl acetate =1):** not applicable**FLASH POINT:** not applicable**FLAMMABILITY:** does not ignite or sustain combustion**UPPER/LOWER FLAMMABILITY OR EXPLOSIVE LIMITS:** not applicable**AUTO-IGNITION TEMPERATURE:** not applicable**DECOMPOSITION TEMPERATURE:** not applicable**SECTION 10: STABILITY AND REACTIVITY****REACTIVITY:** Not reactive**CHEMICAL STABILITY:** This product is stable under normal use and storage conditions.**OTHER:****Incompatibilities/Materials to Avoid:** Hydrofluoric acid will etch concrete and form silicon tetrafluoride, a corrosive gas.**Hazardous Decomposition Products:**Intense heat may cause abrupt evolution of CO₂ or trapped moisture**Hazardous Polymerization:** Will not occur

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Likely Routes of exposure: Skin and eye contact; inhalation of airborne particulate from demolition or cutting the product.

Inhalation	Skin	Eyes
Acute Exposure Effects		
Sneezing, coughing, wheezing. Respiratory ailments (including bronchitis, emphysema, COPD) may be aggravated by exposure to particulate generated by cutting or demolition of this product.	Skin contact with dry hardened concrete may cause redness or other signs of irritation/abrasion. Skin contact with wet hardened concrete will cause irritation and burns.	Particulate/dusts from demolition or cutting of product may cause abrasion, irritation, redness and/or watering, swelling of the eyes. Rubbing the eyes with concrete dust-contaminated hands will result in serious eye irritation and possible corneal burns.
Delayed Exposure Effects		
Pre-existing respiratory conditions may be aggravated if airborne particulate is inhaled.	Dry, cracked, itchy skin	Corneal abrasion Corneal burns
Chronic Exposure Effects		
Chronic exposure to dust generated from cutting, grinding, crushing, or drilling hardened concrete may cause bronchitis. Chronic inhalation of crystalline silica (from airborne concrete particulate) can cause scleroderma, silicosis and cancer.	Sensitized individuals may develop allergic dermatitis through skin contact with wet cured concrete.	unknown

LD₅₀ Oral: unknown; not tested; not estimated

LC₅₀ Inhalation: unknown; not tested; not estimated

LD₅₀ Dermal: unknown; not tested; not estimated

CARCINOGENICITY:

	CAS Number	Wt%	IARC List of Classifications	NTP Report on Carcinogen Evaluations	OSHA Carcinogen List	ACGIH 2015 Carcinogen	Prop 65 List
crystalline silica aggregate (from rock) and crystalline quartz (from sand) SiO ₂	14808-60-7	55-70	Vol. 68, 1997: Group 1	11 th Report: respirable crystalline silica is known to be a human carcinogen	Not Listed	A2	Yes
Portland cement (hydraulic calcium silicates)	65997-15-1	15-20	Not listed	Not Listed	Not Listed	A4	Not Listed
Iron(III) oxide Fe ₂ O ₃	1309-37-1	0-2	Sup. 7 (1987): Group 3	Not Listed	Not Listed	A4	Not Listed
Kaolin Al ₂ O ₃ • SiO ₂ • xH ₂ O	1332-58-7	0-1	Not listed	Not Listed	Not Listed	A4	Not Listed
Magnesium oxide	1309-48-4	0-1	Not Listed	Not Listed	Not Listed	A4	Not Listed

IARC Group 1 = carcinogenic to humans; IARC Group 3: not classifiable as a human carcinogen
ACGIH A2 = suspected human carcinogen; ACGIH A4 = not classifiable as a human carcinogen

SECTION 12: ECOLOGICAL INFORMATION

LC₅₀ Aquatic Toxicity: unknown; not tested; estimated to be >100 mg/L; hazard is due to pH (alkalinity) of extractable components

Biodegradability: not applicable (inorganic)

Bioaccumulation potential: not applicable (inorganic)

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WASTE DISPOSAL METHOD: Local/state regulations may require disposal of large quantities of this product as construction debris. Check with local authorities.

RCRA HAZARD CLASS: This product is not a RCRA hazardous waste, and does not meet the definition of characteristic hazardous waste.

SECTION 14: TRANSPORT INFORMATION**U.S. DEPARTMENT OF TRANSPORTATION (US DOT):**

Hazard Class: Not regulated

Proper Shipping: Not regulated

SECTION 15: REGULATORY INFORMATION**U.S. FEDERAL REGULATIONS****TSCA (TOXIC SUBSTANCE CONTROL ACT):**

Concrete and crystalline silica are exempt from reporting under the inventory update rule. All other ingredients in this product are in compliance with US TSCA Chemical Substance Inventory Requirements.

CERCLA (COMPREHENSIVE RESPONSE COMPENSATION, AND LIABILITY ACT) (40 CFR302.4):

This product is not listed as a CERCLA hazardous substance.

EPCRA EXTREMELY HAZARDOUS SUBSTANCES (40CFR 355.30): Not regulated.

EPCRA SECTIONS 311/312 HAZARD CATEGORIES (40CFR 370.10):

Dust and particulate from cutting or demolition of this product are considered a hazardous chemical and a delayed health hazard. Hazard Categories: Acute: Yes Chronic: Yes Fire: No Pressure: No Reactivity: No

EPCRA SECTION 313 TOXIC CHEMICAL NOTIFICATION AND RELEASE REPORTING (40 CFR 372.65):

This product contains none of the substances subject to SARA 313 reporting requirements.

STATE REGULATIONS:**California Proposition 65**

Warning: This product contains a chemical known to the State of California to cause cancer: crystalline silica

Ingredient Name	CAS #	% in product	Cancer	Reproductive	No Significant Risk Level for chemicals causing cancer
Crystalline silica	14808-60-7	55-70	Yes	No	Not established

SECTION 16: OTHER INFORMATION**REFERENCES:**

29 CFR 1910 (OSHA); 40 CFR 300-399 (EPA); 49 CFR 172-176 (DOT); ACGIH 2015 Threshold Limit Values for Chemical Substances and Physical Agents; California Code of Regulations: Title 8, Div 1, Ch 4, Subchapter 7, Group 16 (PEL and STEL for Air Contaminants); Globally Harmonized System of Classification and Labeling of Chemicals, United Nations, ST/SG/AC.10/30/Rev.5; International Agency for Research on Cancer (IARC) monograph search; National Toxicology Program (NTP) status search NIOSH Pocket Guide to Chemical Hazards; Proposition 65 List: Chemicals Known to the State to Cause Cancer or Reproductive Toxicity, June 19 2015; Proposition 65 Status Report on No Significant Risk Levels for Carcinogens and Maximum Allowable Dose Levels for Chemicals Causing Reproductive Toxicity, 08/15/2013; The Registry of Toxic Effects of Chemical Substances

PREPARED BY: American Research and Testing Inc. for Stepstone, Inc.,

REVISION HISTORY:

Rev. 0: 03/12/2007: original OSHA MSDS

Rev. 1: 06/23/2015: revised to GHS SDS format

Rev. 1.1: 10/2/2015: fixed typographical errors

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