

SAFETY DATA SHEET

February 6, 2016

SECTION 1: IDENTIFICATION

Identity: Concrete Masonry Products (Block, Brick, Maxbric, Pavers, Retaining Wall Units, Manufactured Concrete Stone, Concrete counterweights)

Manufacturer:
Lee Masonry Products, Inc
4301 Industrial Drive
Bowling Green, KY 42101

Emergency Telephone Number:
(270) 842-3472
Information Telephone Number:
(270) 842-3472

Recommended use: Masonry building units for structure construction, interior and exterior veneer and landscape applications.

SECTION 2: HAZARDOUS INGREDIENTS/IDENTITY INFORMATION



Hazardous Components: Silica, Crystalline Quartz (respirable)

Specific Chemical Identity: Silicon Dioxide SiO₂ (CAS 14808-60-7)

Common Names: Silica, Flint, Sand, Crystalline Free Silica, Quartz, Ground Silica, Silica Flour

Hazard Statements

- Harmful if swallowed
- May cause harm if contact with skin
- Harmful if inhaled
- Can cause eye irritation
- May cause allergy or asthma symptoms or breathing difficulties if inhaled
- May cause allergic skin reaction
- Prolonged inhalation may cause cancer

Hazardous Components	CAS No.	% by Weight	PEL (OSHA) TWA mg/M ³	TLV (ACGIH) TWA mg/M ³
Crystalline Silica	14808-60-7	0-90	(10) / (%SiO ₂ +2) (R) (30) / (%SiO ₂ +2) (T)	.025 (R)
Portland Cement*	65997-15-1	0-10	15 (T); 5 (R)	1 (R)
Calcium Hydroxide	65997-15-1	15-25	15 (T); 5 (R)	1 (R)
Particulate Not Otherwise Regulated	NA	---	15 (T); 5 (R)	10 (T); 3 (R)

NOTE: Exposure limits for components noted with an * contain no asbestos and < 1% Crystalline Silica

OSHA PEL: Exposure to airborne crystalline silica shall not exceed an 8-hour time Weighted average limit as stated in 29 CFR 1910.1000 Table Z-1-A, Air Contaminants, specifically:

Silica, Crystalline Quartz (respirable dust) 0.1 mg/M³

ACGIH TLV: Crystalline Quartz

TLV – TWA = .025 mg/M³ (respirable dust)

American Conference of Governmental Industrial Hygienists

Other Limits: National Institute for Occupational Safety and Health (NIOSH). Recommended standard maximum permissible concentration=0.05 mg/M³ (respirable free silica) as determined by a full-shift sample up to 10-hour working day, 40-hour work week. See NIOSH Criteria for a Recommended Standard Occupational Exposure to Crystalline Silica.

Concrete is a mixture of gravel or rock, sand, Portland cement and water. It may also contain fly-ash, slag, silica fume, calcined clay, fibers (metallic or organic) and color pigment.

Concrete products vary in size and shape depending on final use. Concrete products in their intact state will not release airborne dust, but dust can be produced by cutting, drilling, grinding, and other machining of the product. A single short term exposure to concrete dust presents little or no hazard.

This product contains crystalline silica. Prolonged or repeated inhalation of respirable crystalline silica from this product(s) can cause silicosis, a serious and sometimes disabling lung condition.

Precautionary Statements

- Wash thoroughly after handling
- Do not drink, eat, or smoke when using this product
- Wear protective gloves, protective clothing, eye, face and respiratory protection when using this product.
- Do not handle until all safety precautions have been read and understood. Do not breathe dust, fume, mist, vapors or spray.
- Use only in a well-ventilated area, in case of inadequate ventilation wear respiratory protection

Responses

- If swallowed rinse mouth. Call physician if symptoms persist
- If on skin take off contaminated clothing and rinse with clean water. Call physician if skin irritation symptoms persist
- If inhaled move to an area of fresh air. If experiencing breathing difficulties call physician
- If in eyes rinse with water for several minutes. If irritation persists call physician.

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

Substances:

Specific Chemical Identity: Silicon Dioxide SiO₂ (CAS 14808-60-7)

Limestone (CAS 1317-65-3)

Cement (CAS 65997-15-1 for Portland Cement)

Flyash (Coal Ash by-product CAS 68131-74-8)

Common Names: Sand also known as Silica, Flint, Sand, Crystalline Free Silica, Quartz, Ground Silica, Silica Flour

Limestone also known as marble, marble chips, granite, and calcium carbonate

Cement also known as Portland cement, cement kiln dust, kiln precipitator catch, waste kiln dust, and Ground Granulated Blast Furnace Slag cement

Flyash also known as boiler ash, coal ash byproduct, coal dust, coal flyash and pulverized flyash

Mixtures:

Hazardous Components: Silica, Crystalline Quartz (respirable)

Specific Chemical Identity: Silicon Dioxide SiO₂ (CAS 14808-60-7)

Common Names: Silica, Flint, Sand, Crystalline Free Silica, Quartz, Ground Silica, Silica Flour.

SECTION 4: FIRST-AID MEASURES

Emergency and First Aid Procedures:

EYES: Immediately flush eyes thoroughly with water. Continue flushing eye(s) for at least 15 minutes, including under lids to remove all particles. If eye irritation or symptoms persists call physician immediately.

SKIN: Wash skin with cool water and PH neutral soap or a mild detergent intended for use on the skin. If skin irritation or symptoms persists call physician immediately.

INGESTION: Have the person drink plenty of water and call physician immediately

INHALATION: Remove to fresh air. Seek medical help if coughing or other symptoms do not subside. (Inhalation of gross amounts of dry ingredients in manufactured concrete products requires immediate medical attention.)

SECTION 5: FIRE FIGHTING MEASURES

Flash Point (Method Used): N/A

Flammable Limits: N/A **LEL:** N/A **UEL:** N/A

Extinguishing Media: N/A

Special Fire Fighting Procedures: None

Unusual Fire and Explosion Hazards: None

SECTION 6: ACCIDENTIAL RELEASE MEASURES

Steps to be taken in Case Material is Released or Spilled:

When dry sawing or grinding, use dustless systems for handling, storage, and clean up so that airborne dust does not exceed the PEL. Use adequate ventilation and dust equipment. Practice good housekeeping. Do not permit dust to collect on walls, floors, sills, ledges, machinery, or equipment. Maintain, clean, and fit test respirators in accordance with OSHA regulations. Maintain and test ventilation and dust collection equipment. Wash or vacuum clothing which has become dusty.

Waste Disposal Method:

Normal breakage may be picked up and discarded as common waste. Residue from dry sawing and grinding operations should be disposed of in accordance with Federal, State, and Local regulations.

Other Precautions:

See OSHA Hazard Communication Rule 29 CFR Sections 1910.1200, 1915.99, 1917.28, 1918.90, 1926.59, and 1928.21, and state and local worker or community "right to know" laws and regulations. We recommend that smoking be prohibited in all areas where respirators must be used. **WARN YOUR EMPLOYEES (AND YOUR CUSTOMERS-USERS IN CASE OF RESALE) BY POSTING AND OTHER MEANS, OF THE HAZARD AND OSHA PRECAUTIONS TO BE USED. PROVIDE TRAINING FOR YOUR EMPLOYEES ABOUT THE OSHA PRECAUTIONS.** See also American Society for Testing and Materials (ASTM) Standard Practice E1132-86, "Standard Practice for Health Requirements Relating to Occupational Exposure to Quartz Dust."

SECTION 7: HANDLING & STORAGE

Handling Procedures: Avoid prolonged or repeated breathing of dust. Avoid contact with eyes and skin. Promptly remove dusty clothing which is wet with concrete and launder before reuse. Wash thoroughly after exposure to dust or wet mixtures.

Storage Procedures: None.

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

Component Exposure Limits

Cement Portland, Chemicals (65997-15-1)

- ACGIH: 1 mg/m³ TWA (particulate matter containing no asbestos and <1% crystalline silica, respirable fraction)
- OSHA: 15 mg/m³ TWA (total dust); 5 mg/m³ TWA (respirable fraction)
- NIOSH: 10 mg/m³ TWA (total dust); 5 mg/m³ TWA (respirable fraction)

Quartz (14808-60-7)

- ACGIH: 0.025 mg/m³ TWA (respirable fraction)
- NIOSH: 0.05 mg/m³ TWA (respirable fraction)

Engineering Measures:

Avoid actions that cause dust to become airborne. Use local exhaust or general dilution ventilation to control exposure to within applicable limits.

Personal Protective Equipment: Respiratory:

Use local or general ventilation to control exposures below applicable exposure limits. NIOSH or MSHA approved particulate filter respirators should be used in the context of respiratory protection program meeting the requirements of the OSHA respiratory protection standard [29 CFR 1910.134] to control exposures when ventilation or other controls are inadequate or discomfort or irritation is experienced. Respirator and /or filter cartridge selection should be based on American National Standards Institute (ANSI) Standards Z88.2 Practices for Respiratory Protection.

Personal Protective Equipment: Hands

Where prolonged exposure to unhardened manufactured concrete products might occur, wear impervious gloves to eliminate skin contact. Do not rely on barrier creams; barrier creams should not be used in the place of gloves. Periodically wash areas contacted by wet cement or its dry ingredients with a PH neutral soap and water. Wash again at the end of the work. If irritation occurs or continues wash affected areas and seek medical treatment.

Personal Protective Equipment: Eyes

When engaged in activities where wet concrete or its dry ingredients could contact the eyes, wear safety glasses with side shields or goggles. In extremely dusty environments wear unvented or indirectly vented goggles to avoid eye irritation or injury. Contact lenses should not be worn when working with wet concrete or dry ingredients.

Personal Protective Equipment: Skin and Body

Where prolonged exposure to unhardened manufactured concrete products might occur, wear impervious clothing to eliminate skin contact. Where required, wear boots that are impervious to water to eliminate foot and ankle exposure. If clothing becomes saturated with wet concrete, it should be removed and replaced with clean dry clothing.

SECTION 9: PHYSICAL & CHEMICAL PROPERTIES

Appearance: Concrete block, brick, retaining wall block, concrete faux stone veneer, concrete cast faux limestone accent pieces. Various colors, sizes & shapes.

Upper/lower flammability or explosive limits: N/A

Odor: None

Vapor Pressure: N/A

PH: 12-13 (in water)

Relative Density: N/A

Melting Point / Freezing Point: N/A

Specific Gravity: 1.70-300

Solubility: Not Soluble

Initial boiling point and boiling range: N/A

Flash point: N/A

Evaporation Rate: N/A

Flammability: N/A

Upper / Lower flammability or explosive limits: N/A

Vapor Pressure (mm Hg): N/A

Vapor Density (Air = 1): N/A

Relative Density: N/A

Partition coefficient: n-octano/water: N/A

Auto-Ignition temperature: N/A

Decomposition temperature: N/A

Viscosity: N/A

SECTION 10: STABILITY & REACTIVITY

Reactivity:

Concrete block, brick, retaining wall block, concrete faux stone veneer, concrete cast faux limestone accent pieces in solid form has no known reactivity properties.

Chemical Stability:

Stability: **Unstable:** N/A **Stable:** X **Conditions to Avoid:** None

Incompatibility (Materials to Avoid): None

Hazardous Decomposition or Byproducts: None

Hazardous Polymerization: **May Occur:** N/A **Will Not Occur:** X
Conditions to Avoid: None

SECTION 11: TOXICOLOGICAL INFORMATION

Toxicity Information

Component Analysis – LD50/LC50

Ashes, residues (68131-74-8)

Water (7732-18-5)

Oral LD50 Rat >90 mL/kg

Quartz (14808-60-7)

Oral LD50 Rat 500 mg/kg

Potential Health Effects:

Skin Corrosion: Discomfort or pain cannot be relied upon to alert a person to a hazardous skin exposure. The only effective means of avoiding skin injury involves minimizing skin contact. Exposure during the handling or mixing of dry ingredients may cause drying of the skin with mild irritation, or more significant effects attributable to aggravation of other conditions. Exposure to wet concrete may cause skin effects including thickening, or cracking of the skin. Prolonged exposure to wet concrete can cause chemical burns.

Eye Damage: Exposure to airborne dust during handling or mixing of the dry ingredients in concrete products may cause irritation or inflammation. Eye contact by splashes of wet concrete may cause effects from moderate irritation to chemical burns. Such exposures require immediate first aid and medical attention.

Ingestion: Although inadvertent ingestion of small quantities of concrete products or the dry ingredients are not known to be harmful, accidental ingestion of larger quantities can be harmful and require medical attention.

Inhalation: The ingredients in manufactured concrete products contain crystalline silica. Exposure to these ingredients in excess of the applicable TLV or PEL may cause or aggravate other lung conditions. Exposure to the dry ingredients in manufactured concrete products may cause irritation to the mucous membranes of the nose, throat, and upper respiratory system

Carcinogenicity:

A – General Product Information

May Cause Cancer. Exposures to respirable crystalline silica are not expected during the normal use of this product. Prolonged and repeated exposure to airborne free respirable crystalline silica can result in lung disease and or lung cancer. IARC states that crystalline silica in the form of quartz or cristobalite from occupational sources is carcinogenic to humans.

B – Component Carcinogenicity

Cement, Portland, Chemicals (65997-15-1)
ACGIH: A4 – Not classified as a Human Carcinogen

Quartz (14808-60-7)

ACGIH: A2 – Suspected Human Carcinogen

NIOSH: Potential occupational carcinogen

NTP: Known Human Carcinogen (respirable size) (Select Carcinogen)

IARC: Monograph 100C [2012] (listed under Crystalline Silica inhaled in the form of quartz or cristobalite from occupational sources); Monograph 68 [1997] (Group 1 (carcinogenic to humans))

Reproductive Toxicity:

This product is not reported to have any reproductive toxicity effects.

SECTION 12: ECOLOGICAL INFORMATION

Not Applicable

SECTION 13: DISPOSAL CONSIDERATIONS

Dispose of waste in accordance with local, state and federal regulation.

SECTION 14: TRANSPORT INFORMATION

This product is not classified as a hazardous material under U.S. DOT regulations and therefore is not regulated.

SECTION 15: REGULATORY INFORMATION

US OSHA 29CFR 1910.1200: Considered hazardous under this regulation and should be included in the employers' hazard communication program

SARA (Title III) Sections 311 & 312: Qualifies as a hazardous substance with delayed health effects

SARA (Title III) Section 313: Not subject to reporting requirements

TSCA (May 1997): Some substances are on the TSCA inventory list

Federal Hazardous Substances Act: Is a hazardous substance subject to statutes promulgated under the subject act

California Regulation: WARNING: This product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

Canadian Environmental Protection Act: Not listed

Canadian WHMIS Classification: Considered to be a hazardous material under the Hazardous Products Act as defined by the Controlled Products Regulations (Class D2A, E- Corrosive Material) and subject to the requirements of Health Canada's Workplace Hazardous Material Information (WHMIS). This product has been classified according to the hazard criteria of the Controlled Products Regulation (CPR). This document complies with the WHMIS requirements of the Hazardous Products Act (HPA) and the CPR

SECTION 16: OTHER INFORMATION

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 HEALTH EFFECTS WHICH MAY BE CAUSED BY EXPOSURE TO AIRBORNE DUST PARTICLES CREATED BY DRY SAWING OR GRINDING OF OUR PRODUCTS. CUSTOMERS/USERS OF CONCRETE MASONRY PRODUCTS MUST COMPLY WITH ALL APPLICABLE HEALTH AND SAFETY LAWS, REGULATIONS, AND ORDERS.

Abbreviations:

ACGIH American Conference of Government Industrial Hygienists

CAS Chemical Abstract Service

CFR Code of Federal Regulations

DOT Department of Transportation

IARC International Agency for Research

MSHA Mine Safety and Health Administration

NIOSH National Institute for Occupational Safety and Health

NTP National Toxicity Program

OSHA Occupational Safety and Health Administration

PEL Permissible Exposure Limit

RCRA Resource Conservation and Recovery Act

SARA Superfund Amendments and Reauthorization Act

TLV Threshold Limit Value

TWA Time-weighted Average