Cemstone Products Company.
2025 Centre Point Boulevard, Suite 300
Mendota Heights, MN 55120-1221
Date: January 2016 Rev: 2

Emergency Phone:
1-800-642-3887
Information Phone:
651-688-9292

Section 1: Product Identification

Product Type: Wet concrete

Product Names
Plastic Concrete

Section 2: Hazard Identification

This product is delivered as a ready-mixed cement mud, so there is no dust hazard from the wet material. Crystalline silica exposure can occur after the material is hardened, if it is cut, ground, or otherwise abraded.

The most immediate and likely hazard is irritation or burns from direct contact with the plastic cement, which is alkaline.

Applicable hazard statement based on cement content

Danger.
Causes serious eye damage
Causes skin irritation

Applicable hazard statement based on crystalline silica content
Danger.
May cause cancer from inhaling dust.
Causes damage to respiratory system (silicosis) through prolonged or repeated exposure to inhaled dust.

Danger: Crystalline silica may cause cancer when inhaled. Crystalline silica causes damage to lungs through prolonged or repeated exposure from inhaling dust.

This product has been evaluated according to GHS and 29CFR1910.1200, Appendix A. Because it may contain crystalline silica (quartz), it is categorized in Health Hazard Carcinogen Category 1A and Specific Target Organ Toxicity (Repeated Exposure) Hazard Category 1.

It is categorized as a Health Hazard (serious eye damage/eye irritation - Category 1 and skin irritation – Category 2) because it contains Portland cement.

Applicable hazard statements:
May cause cancer from inhaling dust.
Causes damage to respiratory system (silicosis) through prolonged or repeated exposure to inhaled dust.

Applicable Precautionary Statements
Based on crystalline silica content:
Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Do not breathe dusts
Do not eat, drink or smoke when using this product.
Wash hands thoroughly after handling.
Wear eye protection
If exposed or concerned, or if you feel unwell: Get medical advice.
Store locked up.
Dispose of contents in accord with local regulations

Based on cement content:
Wear skin and eye protection (water resistant protective gloves. Goggles recommended to prevent any dust in eyes).
Wash any exposed skin thoroughly after handling material
Take off contaminated clothing and wash it before reuse.
If IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a doctor if any eye irritation or discomfort develops
IF ON SKIN: wash with plenty of water. If skin irritation occurs, get medical attention.

Section 3: Hazardous Ingredients/Composition

Ingredient	Typical Percentage	CAS #

Portland Cement	20-30%	65997-15-1
Sand, which includes		
silica sand (as quartz)	10-20%	14808-60-7
Calcium oxide	1-10%	1305-78-8
Gravel	40-50%	none
Fly Ash	0-8%	68131-74-8
Blast furnace slag	0-8%	none

Section 4: First Aid Measures

Inhalation:

If irritation or coughing develops, move to fresh air.

Eye contact:

Hold eyelids apart and flush eyes with plenty of water. At least fifteen minutes of flushing is recommended. If any irritation persists or particles are not removed from eye by flushing, get medical attention.

Skin Contact:

Promptly wash off with plenty of soap and water. Get medical attention for any burns or persistent rashes.

Ingestion:

Swallowing harmful amounts is unlikely. If swallowed, check with the Poison Control Center or a doctor. Do not induce vomiting unless directed to do so by medical personnel.

Symptoms of overexposure:

Inhalation: None likely with product as delivered. Breathing the dust from the cured material can irritate the nose and throat, causing coughing, sneezing, and a runny nose. Long term exposure or extremely high short term exposure to respirable crystalline silica, present in the dust, can cause silicosis (lung scarring) and lung cancer.

Eye contact: Irritation, tears (lacrimation). Eye abrasion and irritation may develop from direct contact. Cement reacts with moisture to form a very alkaline solution, which can severely irritate or burn eyes.

Skin Contact: Can cause skin irritation and can dry the skin. Because cement reacts with moisture exothermically to form an alkaline solution, contact with damp skin can cause irritation or burns, which may not be felt immediately. Severe burns of the feet have resulted from cement getting into footwear. Some people may develop an allergic dermatitis (cement itch) from chromate contaminants in Portland cement.

Note to physician: Treat according to symptoms. No known specific antidote.

Section 5: Fire Fighting Measures

Fire extinguishing media: Appropriate for surrounding materials. Product is not flammable.
Special fire fighting procedures: none
Unusual fire and explosion hazards: None
Hazardous combustion products: None expected.

Section 6: Accidental Release Measures

Material will harden in 2-8 hours and can generally be removed after hardening. Do not wash large amounts down drains or allow product to enter sewers – product will harden upon contact with water. If removing while still wet, water may be used to dilute small amounts and to clean area. Wear appropriate personal protective equipment to protect against skin and eye contact.

Section 7: Handling and Storage

Avoid creating dust after material has cured.
Wash hands after use.
Do not eat, drink, or use tobacco products when handling any chemical products.

Storage: No special precautions required.

Section 8: Exposure Controls/Personal Protection

Occupational Exposure Limits:

	OSHA PEL	OSHA 1989 PEL*	ACGIH TLV	NIOSH REL
Crystalline silica (quartz)	10 mg/m^3 (%silica+2)	0.1 mg/m^3 (respirable)	0.025 mg/m^3 (respirable)	0.05 mg/m^3
Portland cement	50 mppcf	10 mg/m^3 (total) 5 mg/m^3 (respirable)	1 mg/m^3 (respirable)	10 mg/m^3 (total) 5 mg/m^3 (respirable)
Lime (calcium oxide)	5 mg/m^3	5 mg/m^3	2 mg/m^3	2 mg/m^3
Gravel**	15 mg/m^3 (total) 5 mg/m^3 (respirable)	15 mg/m^3 (total) 5 mg/m^3 (respirable)	10 mg/m^3 (inhalable) 3 mg/m^3 (respirable)	None

*For states that adopted the 1989 PEL revisions (Minnesota, Oregon, Washington)

**Gravel exposure limits are for particulates not otherwise regulated (OSHA, NIOSH) or for particles (insoluble or poorly soluble) not otherwise specified.

Engineering Controls:
Avoid creating dust when working with hardened product. Water can be used as a dust suppressant if cutting or grinding material after hardening.

Local exhaust ventilation is usually not required.

Personal protective equipment

Respiratory protection: Not needed unless dust is created when working with hardened material.

For protection against irritation from dust or up to ten times the recommended exposure limits, use a NIOSH-approved N-95 filtering facepiece or a half mask respirator equipped with N-95 filters. A more protective respirator (e.g., P100 filters or full face respirator) may be substituted.

Skin protection: Avoid any skin contact. Wear any water-impermeable gloves such as PVC gloves, particularly for prolonged contact. Wear waterproof boots, high enough to prevent any cement from getting into them. Promptly wash off of skin and remove contaminated clothing.

Eye protection: Face shield and safety glasses recommended if material could splash.

Section 9: Physical and Chemical Properties

Appearance and odor: gray, plastic, granular mud.
Flash point: noncombustible.
Flammable limits: N/A
Melting Point: >2700°F
Specific gravity: 2.2-2.5
Solubility in water: slight.
Evaporation Rate: Does not evaporate.
pH: 12-13

Section 10: Stability and Reactivity

Stability: stable
Conditions to avoid: none known.
Incompatibility: will react with water, hydrating product, hardening it, and giving off heat. Avoid strong oxidizers, strong acids
Hazardous polymerization: will not occur
Hazardous decomposition products: Silica will dissolve in hydrofluoric acid and produce a corrosive gas - silicon tetrafluoride. Abrasion can create silica-containing respirable dusts.

Section 11: Toxicological Information

Not considered acutely toxic.

Can damage the eyes and skin. Dust from the hardened material can damage the respiratory system.

Portland cement is caustic and abrasive to the skin. In contact with water or moisture, it will form alkaline hydroxides, which can cause burns that may not be felt immediately.

Portland cement may contain trace amounts of hexavalent chromium. Hexavalent chromium can cause allergic contact dermatitis.

Respirable crystalline silica is categorized as a Health Hazard Carcinogen Category 1A (known to have carcinogenic potential for humans) and a Health Hazard Specific Target Organ Toxicity – Repeated Exposure Category 1. Respirable crystalline silica (quartz) can cause silicosis, a fibrosis (scarring) of the lungs. There is evidence that exposure to respirable silica or the disease silicosis is associated with an increased incidence of Scleroderma, tuberculosis and kidney disorders.

Crystalline silica is listed as carcinogenic according to IARC. ACGIH classified crystalline silica as a suspected human carcinogen.

Portland cement is categorized as Health Hazard Serious Eye Damage/Eye Irritation Category 1 and Serious Skin Category 2, because it forms a strong alkaline solution in water.

Section 12: Ecological Information

Product has not been tested but is expected to have very low acute toxicity.
Ecotoxicity: .
Not considered hazardous to the aquatic environment or to the ozone layer.
Persistence and degradability: Not likely to biodegrade

Mobility in soil: not mobile.

Bioaccumulation: Not likely to bioaccumulate

Section 13: Disposal Considerations

As provided, not a RCRA-regulated waste.
Dispose of in accordance with federal, state, and local regulations.

Section 14: Transportation

Not a DOT-regulated hazardous material. Not classified as dangerous goods for DOT, IATA, IMDG, TDG

Section 15: Regulatory Information

This product may contain 0.01% or more of crystalline silica, regulated under California Proposition 65 as a chemical known to the state of California to cause cancer or reproductive effects. It is on the New Jersey Right to Know Hazardous Substance List.

This product does not contain any hazardous air pollutants, nor any chemicals regulated under:

CERCLA	SARA 302 EHS
SARA 311/312	SARA 313

Section 16: Other Information

HMIS® Rating: Health: 0* Fire: 0 Reactivity: 0
HMIS® is a registered trademark of the National Paint and Coatings Association

NFPA 704 Rating: Health: 0 Fire: 0 Reactivity: 0
NFPA rating, from the National Fire Protection Association, is for emergency response

NOTE: The information and recommendations contained herein are based upon data believed to be correct and relate to this specific material. It may not be valid if the material is used with any other materials or in any processes. However, no guarantee or warranty of any kind, express or implied, is made with respect to this information. We accept no responsibility and disclaim all liability for any harmful effects which may be caused by exposure to silica contained in our products. Before using any product, read its label and safety data sheet.