



MONO CERAMICS INCORPORATED

SAFETY DATA SHEET

1. PRODUCT IDENTIFICATION – DS93-33

Manufacturer's Name: Mono Ceramics Incorporated **CAS Number:** Mixture
Address: 2235 Pipestone Rd.
 Benton Harbor, MI 49022
Emergency Telephone No.: (269) 925-0212 **Effective Date:** 04/29/2013
Information Telephone No.: (269) 925-0212 **Supersedes Date:** 03/11/2012
Trade Name: Precast Monocrete DS93-33 **Prepared By:** SK
Synonyms: DS93-33

2. COMPOSITION INFORMATION ON INGREDIENTS

Substance	CAS Number	Percent Range %
Aluminosilicate	1302-93-8	45-65
Calcined Bauxite	1318-16-7	15-25
Aluminium Oxide	1344-28-1	20-35
Silica Amorphous	69012-64-2	2-5
Cristobalite / Crystalline Silica	14464-46-1	0.1-1
Cement, Calcium Aluminate	65997-16-2	1-5
Steel Shapes	1269-05-9	2 - 7

3. HAZARD IDENTIFICATION

Eye Contact: May cause minor mechanical irritation
Skin Contact: May cause minor irritation and dry skin.
Inhalation: May cause irritation to mucous membranes.

Substance & CAS Number	Carcinogenic Data	Summary of Hazards
Silica, Amorphous (CAS 69012-64-2)	IARC Group 3	Respiratory: Inhalation Hazard
Cristobalite (CAS 14464-46-1)	IARC Group 1	Respiratory: May Develop Silicosis

Health Data: In the form supplied, i.e., a pre-cast shape, the product does not constitute a health hazard. In the "as used" form, dependent on method of disposal, i.e., if broken down with the generation of dust, may cause irritation to eyes, skin, and lungs as described previously in Section III.

4. EMERGENCY & FIRST AID PROCEDURES

Eye Contact: Wash with copious quantities of clean water. An eyewash station should be available where airborne dust is a possibility
Skin Contact: Wash from skin with mild soap and water.
Inhalation: Remove from affected area.
Ingestion: Rinse mouth with water and clear nasal passages.

5. FIRE FIGHTING PROCEDURES AND PROTECTION INFORMATION

Flash Point: N/A Auto-ignition Temperature: N/A
 Flammable Limits: Non-flammable, Non-combustible
 Extinguishing Media : None Required
 Special Fire Fighting Procedures: None Required
 Unusual Fire & Explosive Conditions: None

6. ACCIDENTAL RELEASE MEASURES

Spill: Where appropriate protective clothing as described in section 8. Collect using dustless method and place in appropriate container for use. Do not use compressed air. Report releases as required by local, state, provincial and federal authorities.

Steps to be Taken if Material is released or Spilled: Avoid generation of dust. All spillages should be swept up and removed promptly as presence of steel fibres could penetrate footwear when stepped on.

7. HANDLING AND STORAGE

Handling: Avoid contact with the eyes and skin. Do not breathe dust. Wear protective clothing and equipment as described in section 8. Use with adequate ventilation and proper dust collection methods to keep exposure level below occupational exposure limits. Wash thoroughly with soap and water after handling. Keep containers closed when not in use.

Storage: Keep dry until ready for use. Store in a cool, dry, well ventilated area, away from incompatible materials. Protect from physical damage.

8. EXPOSURE CONTROL/PERSONAL PROTECTION

Occupational Exposure Limits:
 United States

Chemical	OSHA PEL : TWA	ACGIH TLV : TWA
Aluminosilicate	Nuisance Particulate (resp.) 5mg/m3	Nuisance Particulate (resp.) 5mg/m3
Calcined Bauxite	(resp.) 10mg/m3 (as Al ₂ O ₃)	(resp.) 15mg/m3 (Total 5mg/m3 (Resp.))
Aluminium Oxide	(resp.) 5mg/m3	(resp.) 1mg/m3
Silica, Amorphous		Withdrawn
Cristobalite, Crystalline Silica	** 2mg/m3	(resp.) 0.025mg/m3
Cement, Calcium Aluminate	Nuisance Particulate (resp.) 5mg/m3	Nuisance Particulate (resp.) 5mg/m3

PEL ** Respirable = 10mg/m³ / 2 (%SiO₂ + 2)

R - respirable fraction

T - Total Dust

9. PHYSICAL / CHEMICAL CHARACTERISTICS

Boiling Point: N/A Percent Volatile: No Data
 Melting Point: N/A Vapour Density (Air = 1): No Data
 Appearance: In Cast form supplied-White /Grey Granular Density at 20°C(68°F) 3.15g/cm³
 Evaporation Rate (EE=1): No Data Solubility: Insoluble
 Vapour Pressure: N/A
 Odour: Odourless

10. STABILITY AND REACTIVITY

Stability: Stable
 Conditions to avoid: None
 Hazardous Polymerization: Will not occur
 Conditions to avoid: None
 Incompatible Materials to avoid: None
 Hazardous Decomposition Products: Amorphous silica may convert to crystalline silica at high temperatures.

11 TOXICOLOGICAL INFORMATION

Eyes: Dust may cause irritation or redness with inflammation of the cornea. May cause mechanical irritation.

Direct contact with wet cement or large amounts of dry powder may cause irritation or burns with possible blindness.

Skin: Contact with dry powder may cause drying of the skin and mild irritation. May cause mechanical irritation.

Contact with wet cement may cause irritation with thickening, cracking and fissuring of the skin.

Prolonged contact may cause skin burns. May cause allergic skin reaction in some individuals.

Ingestion: Large amounts may cause gastrointestinal irritation or burns with nausea and diarrhea.

Inhalation: Inhalation of dust may cause irritation to nose, throat and upper respiratory tract with coughing and shortness of breath.

Chronic Health Effects: Chronic over exposure to respirable dust may cause lung damage.

Chronic inhalation of respirable crystalline silica may cause a progressive, disabling and sometimes fatal lung disease called silicosis.

Symptoms include cough, shortness of breath, wheezing, non specific chest illness and reduced pulmonary function.

Carcinogenicity: Crystalline silica quartz is listed as "Carcinogenic To Humans" (Group 1) by IARC.

"Known to be a human Carcinogen " by NTP and a "Suspected Human Carcinogen(A2) by ACGIH.

Medical Conditions Aggravated by Exposure:

Individuals with pre -existing eye, skin and respiratory disorders may be at increased risk from exposure

Acute Toxicity Data: No data available.

12 . ECOLOGICAL INFORMATION

No specific data available. Large amounts released to water will affect Ph to water causing damage to aquatic organisms.

Avoid release to environment.

13. DISPOSAL CONSIDERATIONS

Dispose in accordance with federal, state and local regulations.

14. TRANSPORT INFORMATION

DOT Shipping Description: Not Regulated

DOT Technical Name: None

DOT Hazard Class: N/A

UN Number: N/A

DOT Labels Required (49CFR172.101): N/A

Hazardous Substance (49CFR172.101): None

Reportable Quantity: N/A

IMDG Shipping Description: Not Regulated

ID Number: N/A

Hazard Class: N/A

Packing Group: None

Labels Required: N/A

15. REGULATORY INFORMATION

U.S. REGULATIONS

CERCLA 103 Reportable Quantity: This product is not subject to CERCLA reporting requirements.

Many states have more stringent release reporting requirements.

Report spills required under federal, state and local regulations

SARA TITLE 111:

Hazard Category For Section 311/312: Acute health, Chronic health

Section 313 Toxic Chemicals:

This product contains the following chemicals subject to Annual Release Reporting Requirements Under SARA Title 111,

Section 313 (40 CFR 372): None

Section 302 Extremely Hazardous Substances (TPQ): None

EPA Toxic Substances Control Act (TSCA): All of the components of this product are listed on the TSCA inventory.

16. OTHER INFORMATION

Additional Information: This material is formulated with components purchased from other companies. In many instances, especially when proprietary or trade secret materials are used, Mono Ceramics Incorporated must rely upon the hazard evaluation of such components submitted to Mono Ceramics by that product's manufacturer or importer.

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