

Ready Mixed Concrete Safety Data Sheet

Section 1. Identification

Product Name: Ready Mixed Concrete

Recommended use: Building material

Restrictions on use: None known.

Manufacturer Name: CENTRE CONCRETE COMPANY

Address: 2280 East College Avenue
State College, PA 16801

Telephone number: (814) 238-2471

Emergency phone number: (814) 238-2471

Date of Preparation: December 11, 2013

Section 2. Hazard(s) Identification

Classification:

Eye Damage Category 1

Skin Irritation Category 2

Skin Sensitization Category 1

Specific Target Organ Toxicity – Repeat Exposure Category 1

Carcinogen Category 1A

Label Elements:



Causes serious eye damage.

Causes skin irritation.

May cause an allergic skin reaction.

Causes damage to lungs through prolonged or repeated inhalation.

May cause cancer.

Precautionary Phrase:

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

Do not breathe dust, fume, gas, mist, vapors or spray.

Wash thoroughly after handling.

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

Contaminated work clothing should not be allowed out of the workplace.

Wear protective gloves, protective clothing, eye protection or face protection.

IF ON SKIN: Wash with plenty of soap and water.

If skin irritation or rash occurs: Get medical attention.

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 POISON CENTER.

IF exposed or concerned: Get medical attention.
Store locked up.
Dispose of contents and container in accordance with local and national regulations.

Section 3. Composition / Information on Ingredients

Chemical name	CAS No.	Concentration
Portland Cement	65997-15-1	10-30%
Crystalline Silica, Quartz	14808-60-7	20-40%
Rosin	8050-09-7	<0.5%
Sodium Nitrate	7631-99-4	0-5%
Calcium Chloride	10043-52-4	0-10%
Calcium Nitrate Tetrahydrate	13477-34-4	0-25%
Sodium Thiocyanate	540-72-7	0-5%
Diethanolamine	111-42-2	<0.2%

The specific identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

Section 4. First-Aid Measures

Inhalation: Remove to fresh air. If breathing is difficult, administer oxygen. If breathing has stopped, give artificial ventilation. Get medical attention if irritation persists.

Skin contact: Remove contaminated clothing and launder before reuse. Wash skin with a cool water and pH-neutral soap. Get medical attention if irritation develops or persists.

Eye contact: Immediately flush eyes with large quantities of water for at least 15 minutes, holding the eyelids apart. Get immediate medical attention.

Ingestion: If swallowed, drink 1 or 2 glasses of water to dilute. Never give anything by mouth to an unconscious or convulsing person. Get immediate medical attention.

Most important symptoms/effects, acute and delayed: Dust may cause eye and skin irritation or burns. Wet cement may cause eye and skin damage. Inhalation of dust may cause mucous membrane and respiratory irritation. Prolonged overexposure to respirable crystalline silica may cause lung disease (silicosis) and increase the risk of lung cancer. Risk of cancer depends on duration and level of exposure.

Indication of immediate medical attention and special treatment, if necessary:

Section 5. Fire-Fighting Measures

Suitable (and unsuitable) extinguishing media: Use media appropriate to the surrounding fire.

Specific hazards arising from the chemical: None known.

Special protective equipment and precautions for fire-fighters: Firefighters should wear full emergency equipment and NIOSH approved positive pressure self-contained breathing apparatus.

Section 6. Accidental Release Measures

Personal precautions, protective equipment, and emergency procedures: Wear appropriate protective clothing and equipment to prevent eye and skin contact.

Environmental precautions: Report spill as required by local and federal regulations.

Methods and materials for containment and cleaning up: Collect using dustless method and place in appropriate container for use or disposal. Do not use compressed air.

Section 7. Handling and Storage

Precautions for safe 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 use.

Empty containers retain product residues. Follow all SDS precautions in handling empty containers.

Conditions for safe storage, including any incompatibilities. Keep dry until ready to use. Store in a cool, dry, well ventilated area away from incompatible materials. Protect from physical damage.

Section 8. Exposure Controls / Personal Protection

Exposure guidelines:

Portland Cement	5 mg/m ³ TWA OSHA PEL 10 mg/m ³ TWA ACGIH TLV
Crystalline Silica, Quartz	10 mg/m ³ TWA OSHA PEL (respirable fraction) % Silica + 2 0.025 mg/m ³ TWA ACGIH TLV (respirable fraction)
Rosin	None Established
Sodium Nitrate	None Established
Calcium Chloride	None Established
Calcium Nitrate Tetrahydrate	None Established
Sodium Thiocyanate	None Established
Diethanolamine	1 mg/m ³ TWA ACGIH TLV (as inhalation fraction and vapor)

Appropriate engineering controls: Use with adequate local exhaust ventilation to maintain exposures below the occupational exposure limits.

Individual protection measures, such as personal protective equipment:

Respiratory protection: If the exposure limits are exceeded a NIOSH approved particulate respirator appropriate for the form and concentration of the contaminants should be used. Selection and use of respiratory equipment must be in accordance with OSHA 1910.134 or other applicable regulations and good industrial hygiene practice.

Skin protection: Alkali/abrasive resistant gloves are recommended to prevent skin contact.

Eye protection: Chemical safety goggles are recommended to prevent eye contact.

Other: Impervious clothing as needed to avoid skin contact and contamination of personal clothing. A safety shower and eye wash should be available in the immediate work area. If clothing becomes contaminated with dust or wet cement, remove immediately and launder before reuse.

Section 9. Physical and Chemical Properties

Appearance: White powder

Odor: No odor.

Odor threshold: Not applicable	pH: Not applicable
Melting point/freezing point: Not applicable	Boiling point: Not applicable
Flash point: Not flammable	Evaporation rate: Not applicable
Flammability (solid, gas): Not applicable	Decomposition temperature: Not applicable
Flammable limits: LEL: Not applicable	UEL: Not applicable
Vapor pressure: Not applicable	Vapor density: Not applicable
Relative density: 3.15	Solubility in Water: Slightly
Partition coefficient: n-octanol/water: Not applicable	Auto-ignition temperature: Not applicable

Section 10. Stability and Reactivity

Reactivity: Not reactive under normal conditions of use.

Chemical stability: Stable

Possibility of hazardous reactions: Crystalline silica will dissolve in hydrofluoric acid and produce silicone tetrafluoride.

Conditions to avoid: Unintentional contact with water will result in hydration and produce caustic calcium hydroxide.

Incompatible materials: Avoid contact with acids, ammonium salts and aluminum.

Hazardous decomposition products: None known.

Section 11. Toxicological Information

Acute effects of exposure:

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

Skin Contact: 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 an allergic skin reaction.

Eye Contact: 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.

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

Chronic Effects: Chronic inhalation of respirable crystalline silica dust 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.

Sensitization: Rosin has been shown to cause skin sensitization in humans and in animal studies.

Germ Cell Mutagenicity: None of the components have been shown to cause germ cell mutagenicity.

Reproductive Toxicity: None of the components have been shown to cause reproductive or developmental toxicity.

Carcinogenicity: Crystalline silica quartz is listed as “Carcinogenic to Humans” (Group 1) by IARC and “Known to be a Human Carcinogen” by NTP. Diethanolamine is listed as “Possibly Carcinogenic to Humans” (Group 2B). None of the other components greater than 0.1% is listed by IARC, NTP, ACGIH or OSHA as a carcinogen.

Acute toxicity values:

Portland Cement: No toxicity data available

Crystalline Silica, Quartz: Oral rat LD50 >22,500 mg/kg

Rosin: Oral rat LD50 2800 mg/kg, Dermal rat LD50 >2000 mg/kg
 Sodium Nitrate: Oral rat LD50 3430 mg/kg, Dermal rat LD50 >5000 mg/kg (structurally similar chemical)
 Calcium Chloride: Oral rat LD50 2301 mg/kg, Dermal rabbit LD50 > 5000 mg/kg
 Calcium Nitrate Tetrahydrate: Oral rat LD50 1000 mg/kg, Dermal rat >2000 mg/kg (structurally similar chemical)
 Sodium Thiocyanate: Oral rat LD50 764 mg/kg, Dermal rat LD50 >2000 mg/kg
 Diethanolamine: Oral rat LD50 1100 mg/kg

Section 12. Ecological Information

This product may be harmful to the aquatic environment.

Ecotoxicity values:

Portland Cement: No toxicity data available
 Crystalline Silica: 72 hr LC50 carp >10,000 mg/L
 Rosin: No data available
 Sodium Nitrate: 24 hr EC50 daphnia magna 8609 mg/l
 Calcium Chloride: 96 hr LC50 Pimephales promelas 630 mg/L, 48 hr daphnia magna 2400 mg/L, 72 hr Pseudokirchnerella subcapitata 27000 mg/L
 Calcium Nitrate Tetrahydrate: 96 hr LC50 Oncorhynchus mykiss > 98.9 mg/L, 48 hr EC50 daphnia magna 490 mg/L (structurally similar chemical)
 Sodium Thiocyanate: 96 hr Oncorhynchus mykiss 65 mg/L, 48 hr EC50 daphnia magna 3.56 mg/L, 72 hr EC50 Pseudokirchnerella subcapitata 150 mg/L (structurally similar chemical)
 Diethanolamine: 96 hr LC50 Pimephales promelas 1460 mg/L, 48 EC50 daphnia magna 55 mg/L, 96 hr Pseudokirchnerella subcapitata 2.2 mg/L

Persistence and degradability: Biodegradation is not applicable to inorganic substances.

Bioaccumulative potential: Not expected to be bioaccumulative.

Mobility in soil: No data available.

Other adverse effects: None known.

Section 13. Disposal Considerations

Dispose in accordance with all local, state and federal regulations.

Section 14. Transport Information

	UN Number	Proper shipping name	Hazard Class	Packing Group	Environmental Hazard
DOT		Not Regulated			None
TDG		Not Regulated			

Transport in bulk (according to Annex II of MARPOL 73/78 and the IBC Code): Not determined

Special precautions: None known

Section 15. Regulatory Information

Safety, health, and environmental regulations specific for the product in question.

CERCLA Hazardous Substances (Section 103)/RQ: This product has a Reportable Quantity (RQ) of 50,000 lbs. based on the RQ for diethanolamine of 100 lbs. Releases above the RQ must be reported to the National Response Center. Many states have more stringent release reporting requirements. Report spills required under federal, state and local regulations.

SARA Hazard Category (311/312): Acute health, Chronic Health

EPA SARA 313: This product contains the following chemicals regulated under SARA Title III, section 313:

Diethanolamine	11-42-2	<0.2%
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EPA TSCA Inventory: All of the components of this product are listed on the TSCA inventory.

CANADA:

Canadian CEPA: the components of this product are listed on the Canadian DSL.

Canadian WHMIS Classification: Class D Division 2A, Class D Division 2B

This product has been classified under the CPR and this SDS discloses information elements required by the CPR.

Section 16. Other Information

SDS Revision History: New SDS

Date of preparation: 11 December 2013

Date of last revision: None