SAFETY DATA SHEET
Effective Date: 6/1/2015
Replaces: February 2004

Readymix Concrete

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: Readymix Concrete
Synonyms/Common Names: Portland cement concrete, Readymix
Manufacturer/Contact Info: Teichert Aggregates
PO Box 15002
Sacramento, CA 95851
General Phone Number: (916) 484-3011 (8-5, PST, M-F)
Emergency Phone Number: (800) 287-7383

SECTION 2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW
Corrosive. Causes skin and eye burns. Harmful in contact with eyes.

OSHA REGULATORY STATUS
This product is considered hazardous under 29 CFR 1910.1200 (Hazard Communication) and 8 CCR § 5194 (Cal/OSHA).

POTENTIAL HEALTH EFFECTS

Routes of Exposure:
Inhalation. Skin contact. Eye contact.

Eye Contact:
Contact may irritate or burn eyes. Eye contact may result in corneal injury. Do not get this material in contact with eyes.

Skin:
Causes skin irritation. Prolonged or repeated contact can result in defatting and drying of the skin which may result in skin irritation and dermatitis (rash). Do not get this material in contact with skin.

Inhalation:
Product as sold (wet) does not pose inhalation hazard. If product is allowed to harden and is then finely fragmented, inhalation of quartz dust can lead to the lung disease known as silicosis.

Ingestion:
May have a corrosive effect on the digestive canal.

TARGET ORGANS
Eyes. Skin.

CHRONIC EFFECTS
Conjunctiva. May cause allergic skin disorders in sensitive individuals. Repeated exposure may cause skin dryness or cracking.

SIGNS AND SYMPTOMS

POTENTIAL ENVIRONMENT EFFECTS
The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

GHS label elements

Signal word: Danger
Hazard Statements: Causes severe skin burns and eye damage. May cause an allergic skin reaction. May cause respiratory irritation.
SECTION 3. COMPOSITION / INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Hazardous Components</th>
<th>CAS No.</th>
<th>% by Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Portland cement (1)</td>
<td>65997-15-1</td>
<td>4-40</td>
</tr>
<tr>
<td>Crushed rock (2)</td>
<td>Mixture</td>
<td>60-91</td>
</tr>
<tr>
<td>Water</td>
<td>7732-18-5</td>
<td>5-15</td>
</tr>
<tr>
<td>Fly ash/pozzolanic additives</td>
<td>68131-74-8</td>
<td>1-8</td>
</tr>
</tbody>
</table>

Comments: (1) Contains natural occurring metal at >1%. Portland cement may also contain trace amount (<0.05%) of naturally occurring potentially harmful constituents such as chromium including hexavalent chromium or other metals. (2) Natural sand includes quartz, a form of crystalline silica. Composition varies naturally. Product is transported and used wet (5-15% water) and unlikely to pose an airborne exposure hazard during normal use.

SECTION 4. FIRST AID MEASURES

Eyes: Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention immediately. Chemical burns must be treated promptly by a physician.

Skin: Remove and isolate contaminated clothing and shoes. Rinse skin with water/shower. Get medical attention if irritation develops or persists. For minor skin contact, avoid spreading material on unaffected skin.

Inhalation: Inhalation of wet product not foreseeable route of exposure.

Ingestion: If material is ingested, immediately contact a poison control center. Have victim rinse mouth thoroughly with water. Do not induce vomiting without advice from poison control center. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration. Do not use mouth-to-mouth method if victim ingested the substance.

Notes to Physician: If breathing is difficult, give oxygen. Keep victim under observation. Symptoms may be delayed. Skin contact may aggravate an existing dermatitis.

General Advice: If exposed or concerned: get medical attention/advice. Keep victim warm. Keep victim under observation. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye Contact – May cause serious eye damage. Adverse symptoms may include pain, watering and redness
Inhalation – May cause respiratory irritation Adverse symptoms may include respiratory tract irritation, coughing
Skin Contact – May cause severe burns and allergic skin reaction Adverse symptoms may include pain, irritation or redness
Ingestion – May cause burns to mouth, throat and stomach Adverse symptoms may include stomach pains

SECTION 5. FIRE FIGHTING MEASURES

Flammable Properties: Not a fire hazard.

Flashpoint (method used): Product: NE

Flammable Limits in Air (% volume in air): Not available LEL: NE UEL: NE


Hazardous thermal decomposition products Decomposition products may include the following materials carbon dioxide, carbon monoxide, sulfur oxides, metal oxide/oxides

Protection of Firefighters: Use water until well after fire is out. Firefighters should wear appropriate protective equipment.

Specific Methods: Containers close to fire should be removed or cooled with water.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions: Personnel involved with the wet unhardened concrete should take steps to avoid contact with the eyes and skin, through the use of gloves and suitable clothing. Do not touch spilled material unless wearing appropriate protective clothing as described in Section 8. Silica-containing respirable dust particles may be generated by crushing, cutting, grinding, or drilling hardened concrete or concrete products. Follow protective controls defined in Section 8 when handling these products. When cutting, grinding, crushing or drilling hardened concrete, use local exhaust or
general dilution ventilation or other suppression methods to maintain dust levels below exposure limits.

**Environmental Precautions:**
Do not contaminate water sources or sewer. Wet unhardened concrete should be recycled or allowed to harden and dispose.

**Methods for Containment:** Prevent entry into waterways, sewers, basements or confined areas.

**Methods for Clean Up:**
Spill Place spilled material into a contained area and allow wet unhardened concrete to harden and dispose. Follow applicable Federal, State, and local regulations for disposal. Uncontaminated ready mixed concrete is neither a listed nor a characteristic hazardous waste under designations by the USEPA or USDOT. Sweep up or gather material and place in appropriate container for disposal. Avoid dust formation. USDOT Class: Uncontaminated ready mixed concrete does not meet any hazardous material class definition found in Title 49 Code of Federal Regulations Part 173.

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### SECTION 7. HANDLING AND STORAGE

**Handling:**
Put on appropriate personal protective equipment (See section 8). Persons with a history of skin sensitization problems should not be employed in any process in which product is used. Keep formation of airborne dusts to a minimum. Do not get this material in contact with eyes. Do not get this material in contact with skin. Use only with adequate ventilation. Avoid prolonged exposure. Wash thoroughly after handling.

**Respirable crystalline silica-containing dust may be generated when hardened concrete product is subject to mechanical forces such as demolition work, surface treatment (sanding, grooving, chiseling, etc.) and recycling of pavement. Workers should wash hands and face before eating, drinking, and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene.**

**Storage:**
Keep this material away from food, drink and animal feed. Use care in handling/storage. Store in accordance with local/regional/national/international regulation. A key to using the product safely requires the user to recognize that Ready Mixed Concrete reacts chemical burns. Do not get Ready Mixed Concrete inside boots, shoes or gloves. Do not allow wet, saturated clothing to remain against the skin. Promptly remove clothing and shoes that are dusty or wet to concrete mixtures.

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### SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

<table>
<thead>
<tr>
<th>Component</th>
<th>OSHA/MSHA Permissible Exposure Limit (PEL)</th>
<th>ACGIH Threshold Limit Valve (TLV)</th>
<th>Cal/OSHA Permissible Exposure Limit (PEL)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Particulates (Not otherwise regulated)</td>
<td>15 mg/m³ (total) 5 mg/m³ (respirable)</td>
<td>10 mg/m³ (inhalable) 3 mg/m³ (respirable)</td>
<td>10 mg/m³ (total) 5 mg/m³ (respirable)</td>
</tr>
<tr>
<td>Crystalline Silica (Quartz, Cristobalite, Tridymite)</td>
<td>OSHA: 10 mg/m³ (%SiO₂+2) (respirable particulate containing silica) OSHA PEL for cristobalite and tridymite is ½ of the calculated value for quartz. MSHA: 30 mg/m³ (%SiO₂+2) (total particulate containing silica)</td>
<td>0.025 mg/m³ (respirable quartz and cristobalite)</td>
<td>0.1 mg/m³ (respirable quartz) 0.05 mg/m³ (respirable cristobalic and tridymite)</td>
</tr>
<tr>
<td>Portland Cement</td>
<td>10 mg/m³</td>
<td>10 mg/m³ ACGIH has proposed reducing Portland Cement TLV to 1 mg/m³ (respirable fraction) effective 2009</td>
<td>5 mg/m³ 8 hours respirable fraction 15 mg/m³ 8 hours Total Dust</td>
</tr>
<tr>
<td>Limestone</td>
<td>5 mg/m³</td>
<td>5 mg/m³</td>
<td></td>
</tr>
</tbody>
</table>

**Engineering Controls:**
Provide adequate ventilation. Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits.

**Environmental exposure controls:**
Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.

**PERSONAL PROTECTIVE EQUIPMENT:**

**Hygiene measures:**
Clean water should always be readily available for skin(emergency) eye washing. Periodically wash areas contacted by Ready Mixed Concrete with a pH neutral soap and clean, uncontaminated water. If clothing becomes saturated with Ready Mixed Concrete, it should be removed and replaced with clean, dry clothing.

**Eye / Face Protection:**
Do not get this material in contact with eyes. Wear appropriate eye protection, safety glasses with side shields, safety goggles or face shields. Wearing contact lenses when working with concrete is not recommended.

**Skin Protection:**
Do not get this material in contact with skin. Wear appropriate chemical resistant gloves - impervious, waterproof, abrasion and alkali-resistant. Wear appropriate clothing to minimize skin contact. Footwear and other gear to protect the skin should be approved by a specialist before handling this product.

**Respiratory Protection:**
Use respiratory protection particulate concentrations exceeding the Occupational Exposure Limit. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

**General Hygiene Considerations:**
Do not get this material in contact with eyes. Do not get this material in contact with skin. Keep away from food, drink and animal feeding stuffs. Observe good industrial hygiene practices.

### SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance &amp; Odor</td>
<td>Wet mix of mineral aggregate, water, and portland cement. Odor not available.</td>
</tr>
<tr>
<td>pH</td>
<td>Not available</td>
</tr>
<tr>
<td>Melting Point</td>
<td>Not available</td>
</tr>
<tr>
<td>Boiling Point</td>
<td>Not available</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>Not available</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>Not available</td>
</tr>
<tr>
<td>Vapor Density</td>
<td>Not available</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>1.7 – 3 (H₂O=1)</td>
</tr>
<tr>
<td>Solubility (water)</td>
<td>0.1 - 1 %</td>
</tr>
</tbody>
</table>

### SECTION 10. CHEMICAL STABILITY & REACTIVITY INFORMATION

**Reactivity:** Reacts slowly with water forming hydrated compounds, releasing heat and producing a strong alkaline solution.

**Chemical Stability:**
Stable at normal conditions.

**Conditions to Avoid:**
None known.

**Incompatible Materials:**

**Hazardous Decomposition Products:**
None

**Hazardous Polymerization:**
Hazardous polymerization does not occur.

### SECTION 11. TOXICOLOGY INFORMATION

**Sensitization:**
May cause allergic skin disorders in sensitive individuals.

**Local Effects:**
Corrosive quality of wet product poses irritation and burn hazard to skin and eyes.

**Chronic Effects:**
Hazardous by OSHA criteria.

**Carcinogenicity:**
Hazardous by OSHA criteria. Natural sand includes quartz; a form of crystalline silica known to produce lung disease when routinely inhaled. However, product is shipped and used wet (5-15% water) and hence is unlikely to pose an airborne exposure hazard during normal use. Portland cement.

**IARC Monographs on Occupational Exposures to Chemical Agents: Overall evaluation**
- Quartz [Silica Crystalline] (14808-60-7) 1 Human carcinogen

**US ACGIH Threshold Limit Values: A2 carcinogen**
- Quartz [Silica Crystalline] (14808-60-7) Group A2 Suspected human carcinogen

**US NTP Report on Carcinogens: Known carcinogen**
- Quartz [Silica Crystalline] (14808-60-7) Known carcinogen
SECTION 12. ECOLOGICAL INFORMATION

<table>
<thead>
<tr>
<th>Environmental Effects:</th>
<th>Not available.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Persistence and degradability:</td>
<td>Not available</td>
</tr>
<tr>
<td>Bioaccumulative potential:</td>
<td>Not available</td>
</tr>
<tr>
<td>Mobility in soil:</td>
<td>Soil/water partition coefficient (Koc) Not available</td>
</tr>
<tr>
<td>Other:</td>
<td>Not established.</td>
</tr>
</tbody>
</table>

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal Instructions:
Do not allow this material to drain into sewers/water supplies. This product, in its present state, when discarded or disposed of, is not a hazardous waste according to Federal regulations (40 CFR 261.4 (b)(4)). Under RCRA, it is the responsibility of the user of the product to determine, at the time of disposal, whether the product meets RCRA criteria for hazardous waste. The generation of waste should be avoided or minimized wherever possible.

Waste from Residues / Unused Products:
Dispose of waste and residues in accordance with local state and federal requirements.

SECTION 14. TRANSPORT INFORMATION [NOTE: NOT INTENDED TO BE ALL-INCLUSIVE]

<table>
<thead>
<tr>
<th>DOT Proper Shipping Name:</th>
<th>Not regulated</th>
</tr>
</thead>
<tbody>
<tr>
<td>DOT Hazard Classification:</td>
<td>Not applicable</td>
</tr>
<tr>
<td>US/NA Number:</td>
<td>Not regulated</td>
</tr>
<tr>
<td>DOT Packing Group:</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

Labeling Requirements:

Special precautions for user: Transport within user’s premises: Ensure that person’s transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according to Annex II or MARCOL 73/78 and the IBC Code: Not available

SECTION 15. REGULATORY INFORMATION [NOTE: NOT INTENDED TO BE ALL-INCLUSIVE]

US Federal Regulations:
This product is a “Hazardous Chemical” as defined by the OSHA Hazard Communication Standard 29 CFR 1910.1200 (OSHA) and 8 CCR § 5194 (Cal/OSHA).

Comprehensive Environmental Response, Compensation and Liability Act (CERCLA):
Not applicable

Superfund Amendments and Reauthorization Act of 1986 (SARA), Title III:

<table>
<thead>
<tr>
<th>Hazardous Categories:</th>
<th>Section 302 Extremely Hazardous Substance:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Immediate Hazard – Yes</td>
<td>No</td>
</tr>
<tr>
<td>Delayed Hazard – Yes</td>
<td></td>
</tr>
<tr>
<td>Fire Hazard – No</td>
<td>Section 311 Hazardous Chemical Yes</td>
</tr>
<tr>
<td>Pressure Hazard – No</td>
<td></td>
</tr>
<tr>
<td>Reactivity Hazard – No</td>
<td></td>
</tr>
</tbody>
</table>

California Proposition 65:
WARNING: THIS PRODUCT CONTAINS CHEMICALS KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER AND BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM.
State Regulatory Lists:
The following materials/components are specifically listed by individual states. For details on regulatory requirements, you should contact the appropriate agency in your state:

<table>
<thead>
<tr>
<th>State</th>
<th>Regulatory Authority</th>
<th>Substance Description</th>
<th>Listed Date/Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>US - California</td>
<td>Proposition 65 - CRT: Listed substance</td>
<td>Quartz [Silica crystalline]</td>
<td>Listed</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(14808-60-7)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Quartz [Silica crystalline] (14808-60-7)</td>
<td>Listed</td>
</tr>
</tbody>
</table>

SECTION 16. OTHER INFORMATION

Disclaimer of Liability:
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