Material Name: Ready-Mix Concrete (wet, unhardened concrete)

Section 1: Identification

1.1 Product trade names: Pre-Mixed Concrete, Transit Mixed Concrete, Ready-Mix Grout, Lightweight Concrete, Portland Cement Concrete, Concrete Mud (all concrete mix designs prepared by County Materials).

1.2 Product Class: Concrete / Stone Products

Product Codes: N/A

CAS/EC Number: Mixture (composition detailed in Section 3)

Intended Use: Ready-Mix Concrete is a structural component used in construction and civil engineering projects.

1.3 Supplier:
County Materials Corp.
205 North St., P.O. Box 100
Marathon, WI 54448-0100
General Information Telephone: (800) 289-2569
Email: riskclaimssafety@countymaterials.com

1.4 Emergency telephone:
715-223-7788

Section 2: Hazard(s) Identification

2.1 Classification:
- Serious Eye Damage – Category 1
- Skin Corrosion/Irritation – Category 1C
- Skin Sensitizer – Category 1
- Carcinogenicity – Category 1A
- Specific Target Organ Toxicity (Repeat Exposure-Respiratory System) – Category 1
- Acute Oral - Category 4
- Acute Inhalation – Category 3

2.2 Labeling:

Signal Word: DANGER

Hazard Statements
H302 – Harmful if swallowed
H314 – Causes severe skin burns and eye damage
H317 – May cause an allergic skin reaction
H318 – Causes serious eye damage
H331 – Toxic if inhaled
H351 – Suspected of causing cancer.
H372 – Causes damage to the organs (respiratory system) through prolonged or repeated exposure.
Material Name: Ready-Mix Concrete (wet, unhardened concrete)

Section 2: Hazard(s) Identification

Precautionary Statements
P102 – Keep out of the reach of children.
P201 – Obtain special instructions before use.
P202 – Do not handle until all safety precautions have been read and understood.
P260 – Do not breathe dusts.
P264 – Wash hands, face, and other exposed areas of the body thoroughly after handling.
P270 – Do not eat, drink, or smoke when using this product.
P271 – Use only outdoors or in a well-ventilated area.
P280 – Wear protective gloves/protective clothing/eye protection/face protection.
Response
P301 + P330 + P312 – IF SWALLOWED: Rinse mouth. Do Not induce vomiting. Call a POISON CENTER/doctor if you feel unwell.
P303 + P361 + P353– IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.
P304 + P340 + P314 – IF INHALED: Remove person to fresh air and keep comfortable for breathing. Get medical advice/attention if you feel unwell.
P305 + P351 + P338 + P310 – 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/doctor.
P308 + P313 – If exposed or concerned: Get medical advice/attention.
P333 + P313 – If skin irritation or rash occurs: Get medical advice/attention.
P362 + P364 – Take off contaminated clothing. And wash before reuse.
Storage
P403 + P233 – Store in a well-ventilated place. Keep container tightly closed.
P405 – Store locked up.
Disposal
P501 – Dispose of contents/container in accordance with local/regional/national/international regulations.

2.3 Other Hazards: This product contains components that may cause health or environmental hazards (i.e. 100% concentration each), but may not have the same effect as components in this mixture. Dry-mix or unhardened wet-mixed concrete is odorless may be in a powdered or semi-fluid, flowable, granular paste of varying color and texture. It is not flammable. Exposure to entrained dusts can cause acute and chronic health problems. Exposure of sufficient duration to wet concrete can cause serious, potentially irreversible tissue (skin, eye, respiratory tract) damage due to chemical (caustic) burns, including third degree burns.

Section 3: Composition/Information on Ingredients

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>EINECS/EC</th>
<th>CAS</th>
<th>Percent</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Portland Cement</td>
<td>266-043-4</td>
<td>65997-15-1</td>
<td>10-30%</td>
<td>Serious Eye Damage – Category 1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Skin Corrosion/Irritation – Category 1C</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Skin Sensitizer – Category 1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Specific Target Organ Toxicity (Repeat Exposure-Respiratory System) – Category 1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Acute Oral – Category 4</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Acute Inhalation – Category 3</td>
</tr>
</tbody>
</table>
Material Name: Ready-Mix Concrete (wet, unhardened concrete)

Section 2: Hazard(s) Identification

<table>
<thead>
<tr>
<th>Material</th>
<th>CAS Number</th>
<th>Percent</th>
<th>Hazard Classifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calcium Carbonate</td>
<td>207-439-9</td>
<td>1317-65-3</td>
<td>25-65% Serious Eye Damage – Category 1, Skin Corrosion/Irritation – Category 1C, Specific Target Organ Toxicity (Repeat Exposure-Respiratory System) – Category 1, Acute Oral - Category 4, Acute Inhalation – Category 3</td>
</tr>
<tr>
<td>Fly Ash</td>
<td>268-627-4</td>
<td>68131-74-8</td>
<td>0-20% Serious Eye Damage – Category 1, Acute Oral - Category 4, Acute Inhalation – Category 3, Carcinogenicity – Category 1A, Skin Sensitizer – Category 1, Specific Target Organ Toxicity (Repeat Exposure-Respiratory System) – Category 1</td>
</tr>
<tr>
<td>Fine Aggregate-Silica Dioxide (Silica, Quartz, Crystalline Silica)Silica, Quartz (Crystalline, Silica)</td>
<td>231-545-4</td>
<td>14808-60-7</td>
<td>0.1-80% Carcinogenicity – Category 1A, Specific Target Organ Toxicity (Repeat Exposure-Respiratory System) – Category 1, Acute Oral - Category 4, Acute Inhalation – Category 3</td>
</tr>
<tr>
<td>Water</td>
<td>231-791-2</td>
<td>7732-18-5</td>
<td>5-15%</td>
</tr>
</tbody>
</table>

1. This product contains Portland Cement and Fly Ash. These products may contain trace amounts of chemicals including silicates and metals which may be toxic in some forms. These ingredients may include, but are not limited to, chromium, lead, nickel, and mercury compounds, along with other trace constituents.
2. Quartz-Silica may contain trace amounts of crystalline silica (quartz) as a naturally occurring component. Crystalline silica is a known carcinogen.

Section 4: First-Aid Measures

4.1 Description of first aid measures:

Inhalation: If this product is inhaled, remove person immediately to fresh air. If breathing is difficult, give oxygen. SEEK MEDICAL ATTENTION IMMEDIATELY if person is unconscious or unable to breathe.

Skin Contact: Wash exposed skin with clean, potable water. Seek medical attention if burns, abrasions, irritation, rashes or dermatitis occur. Wet mixture may be irritating to skin due to the caustic pH of ingredients.

Eye Contact: Rinse eyes thoroughly with potable water for at least 15 minutes and remove contacts if easy to do. Rinse under eyelids to remove any particles. Seek medical attention for abrasions, burns, and irritation.

4.2 Most important symptoms and effects:

Inhalation: Inhalation of dust may cause irritation of the respiratory tract and pulmonary edema. May cause allergic or asthma like respiratory reactions if inhaled.

Skin Contact: Direct contact with skin may cause burns, or even permanent skin damage. Prolonged and repeated exposure may cause irritation, redness, pain, rashes, and drying and cracking of the skin.
Section 4: First-Aid Measures

Eye Contact: Direct contact with eyes may cause severe irritation, abrasions, burns, blurred vision, redness, conjunctivitis, ulcerations, tissue destruction and permanent eye damage including blindness.

Ingestion: Ingestion may cause severe irritation to the mouth, throat, and gastrointestinal tract, may cause vomiting, headaches, bleeding, and labored breathing. Other medical conditions such as perforation of the gastrointestinal tract, burns, and ulceration may lead to secondary infections or death. These effects may be delayed. Seek medical attention as necessary.

4.3 Indication of any immediate medical attention and special treatment needed: See Section 4.1.

Section 5: Fire-Fighting Measures

5.1 Extinguishing media: Product is not flammable. Use appropriate media for fire adjacent to product.

5.2 Special hazards arising from the substance or mixture: None.

5.3 Advice to firefighters: None.

Section 6: Accidental Release Measures

6.1 Personal precautions: Wear appropriate protective equipment and clothing during clean-up as recommended in Section 8. Use caution if wet unhardened concrete has been spilled. Wet uncured concrete can be recycled. Steps should be taken to avoid contact with skin and eyes. If mix is dry, avoid breathing dust. Wear dust-mask or respirator if required. Respirable crystalline silica dust particles may be generated by mixing the product or by crushing, cutting, grinding, or drilling cured/hardened concrete or concrete products.

6.2 Environmental precautions: Carefully contain and stop the source of spill. Wet unhardened concrete should be recycled or allowed to harden and disposed of or used as fill. Avoid washing down sewage and drainage systems or into bodies of water (e.g. lakes, streams, wetlands, etc.).

6.3 Methods and materials for containment and cleaning up: Wet unhardened concrete should be allowed to harden prior to disposal or recycling.

6.4 Reference to other sections: Use information obtained throughout this SDS to be fully prepared in case of accidental release.

Section 7: Handling and Storage

7.1 Precautions for safe handling: Avoid contact with skin, eyes, and clothing. Persons handling the product should wear recommended personal protective equipment (PPE) as noted in Section 8. Do not ingest. Wash thoroughly with potable water and mild soap after handling. Avoiding breathing dusts. Ensure adequate ventilation (or a respirator should be worn if PELs are exceeded). Any drilling of hardened concrete, cutting, crushing, and grinding, should be done with caution. Use local exhaust or perform activities in well-ventilated areas. Water suppression may be used to limit airborne dusts.

7.2 Conditions for safe storage, including any incompatibilities: Material is basic. Store in dry areas. Product is considered stable but some ingredients may react with strong oxidizers, reducing agents, acids and certain metals to create hazardous gases.

7.3 Specific end uses: See Section 1 for intended uses.
Section 8: Exposure Controls/Personal Protection

8.1 Control parameters: Note the limits shown below are for guidance only. Follow applicable regulations in your jurisdiction.

<table>
<thead>
<tr>
<th>Substance Name</th>
<th>Source</th>
<th>Exposure Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Portland Cement</td>
<td>ACGIH</td>
<td>1 mg/m³ (R)</td>
</tr>
<tr>
<td></td>
<td>OSHA</td>
<td>15 mg/m³ (T) / 5 mg/m³ (R)</td>
</tr>
<tr>
<td></td>
<td>NIOSH</td>
<td>10 mg/m³ (T) / 5 mg/m³ (R)</td>
</tr>
<tr>
<td></td>
<td>IDLH</td>
<td>5000 mg/m³</td>
</tr>
<tr>
<td>Calcium Carbonate</td>
<td>ACGIH</td>
<td>Removed TLV due to insufficient data. Use PNOC for exposure limit.</td>
</tr>
<tr>
<td></td>
<td>OSHA</td>
<td>15 mg/m³ (T) / 5 mg/m³ (R)</td>
</tr>
<tr>
<td></td>
<td>NIOSH</td>
<td>10 mg/m³ (T) / 5 mg/m³ (R)</td>
</tr>
<tr>
<td>Fly Ash</td>
<td>--</td>
<td>*Fly Ash is a byproduct from combustion of coal and thus may contain a number of trace chemicals including silicates and metals. No exposure limit is available for Fly Ash. Use proper ventilation or approved respirator to avoid breathing dusts.</td>
</tr>
<tr>
<td>Quartz, Silica (Crystalline Silica)</td>
<td>ACGIH</td>
<td>0.025 mg/m³</td>
</tr>
<tr>
<td></td>
<td>OSHA</td>
<td>(30 mg/m³ ÷ (%SiO₂+2)) (T)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(10 mg/m³ ÷ (%SiO₂+2)) (R)</td>
</tr>
<tr>
<td></td>
<td>NIOSH</td>
<td>0.05 mg/m³ / 0.025 mg/m³</td>
</tr>
<tr>
<td>Total Dust (or Particulates Not Otherwise Classified)</td>
<td>ACGIH</td>
<td>none</td>
</tr>
<tr>
<td></td>
<td>OSHA</td>
<td>15 mg/m³ (T) / 5 mg/m³ (R)</td>
</tr>
<tr>
<td></td>
<td>NIOSH</td>
<td>10 mg/m³ (T) / 5 mg/m³ (R)</td>
</tr>
</tbody>
</table>

8.1.1 Currently recommended monitoring procedures: No recommendations.

8.1.2 Exposure guidelines for air contaminants, if any: See Section 8.1

8.1.3 DNELS and PNECS for exposure scenarios: Information not available at this time.

8.1.4 Control banding for risk management: Use good industrial hygiene practice, where appropriate PPE and use local ventilation.

8.2 Exposure Controls:

8.2.1 Appropriate engineering controls: Good dilution (general) ventilation should be assured. Since this is usually handled in an outdoor situation, this is mostly a non-issue. Ventilation should effectively remove and prevent buildup of any dusts generated from the handling of this product. Water suppression may be used to limit airborne dusts.

8.2.2 Individual protection methods: Use good industrial hygiene practices in handling this material. Eye wash stations should be available. Wash potentially exposed skin thoroughly with water and mild soap after use. If irritation or redness occurs treat symptomatically or consult a doctor immediately. Contact with wet uncured/unhardened concrete or cement mixtures can cause skin irritation, chemical burns, or serious eye damage. Avoid contact with eyes and skin. Wear gloves, safety glasses and protective clothing. If working in wet concrete use waterproof boots. If finishing concrete, wear waterproof knee pads. Wash exposed skin with clean, potable water and mild soap as soon as possible. Seek medical attention if discomfort occurs or persists. Indirect contact through gloves or clothing can be the equivalent of direct contact. Immediately rinse out mixtures from clothing. In case of eye contact, flush with plenty of clean, potable water for at least 15 minutes. Remove contacts if easy to do so. Seek medical attention immediately. Avoid inhalation and direct contact with skin and eyes from dry concrete dust. Wash contaminated skin before eating, drinking, using the restroom or smoking. KEEP OUT OF REACH OF CHILDREN.
Material Name: Ready-Mix Concrete (wet, unhardened concrete)

Section 4: First-Aid Measures

Eye/Face: Use appropriate eye protection: glasses with side shields or googles. Dust googles or face shield (preferred) should be worn during cutting, grinding or drilling of hardened concrete.

Skin: Avoid contact by covering skin with protective clothing or protective suit. Wear water-proof gloves and eye protection. Wash thoroughly with potable water and mild soap.

Respiratory: If airborne concentrations are above the applicable exposure limits, use NIOSH-approved respirator if qualified.

Section 9: Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical State</td>
<td>Dry powdery aggregate, (or wet mixed flowable-semi-liquid)</td>
</tr>
<tr>
<td>Color</td>
<td>Varying gray shades</td>
</tr>
<tr>
<td>Odor</td>
<td>Odorless</td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Melting Point</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Freezing Point</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Initial Boiling Point</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Lower and Upper Explosion Limits/Flammability Limit</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Flash Point</td>
<td>Non-flammable</td>
</tr>
<tr>
<td>Auto-Ignition Temperature</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Decomposition Temperature</td>
<td>Not evaluated</td>
</tr>
<tr>
<td>pH</td>
<td>Caustic (when wet)</td>
</tr>
<tr>
<td>Kinematic Viscosity</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Solubility</td>
<td>Non-soluble</td>
</tr>
<tr>
<td>Partition Coefficient</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Density (and/or Relative Density)</td>
<td>Not evaluated</td>
</tr>
<tr>
<td>Relative Vapor Density</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Particle Characteristics</td>
<td>Variable granular-sizes in mixture</td>
</tr>
</tbody>
</table>

Section 10: Stability and Reactivity

10.1 Reactivity: Ingredients may react with incompatible materials. Material is caustic. Product may react with strong oxidizers, reducing agents, acids and certain metals to create hazardous gases.

10.2 Chemical stability: Hardened concrete is stable under ordinary conditions of use and storage. Wet mix will harden in approximately 2-8 hours depending on quantity and mixture.
Material Name: Ready-Mix Concrete (wet, unhardened concrete)

Section 10: Stability and Reactivity

10.3 Possibility of hazardous reactions: Possible release of gases when ingredients come into contact with incompatible materials. Avoid dust created by agitation. Calcium carbonate is incompatible with acids, alum, ammonium salts, mercury, hydrogen, fluorine, and magnesium. Avoid contact or storage of dusty materials near incompatible substances. Avoid contact with strong oxidizing agents such as fluorine, boron trifluoride, chlorine trifluoride, manganese trifluoride, and oxygen difluoride as reactions may occur. Silica dissolves readily in hydrofluoric acid producing a corrosive gas, silicon tetrafluoride.

10.4 Conditions to avoid: Avoid excessive handling, cutting, drilling, or grinding of hardened material which may generate dust levels above permissible exposure limits. Aluminum powder and other alkali and alkaline earth metals will react in wet concrete, releasing hydrogen gas.

10.5 Incompatible materials: Potassium chlorate, potassium perchlorate, potassium permanganate, sodium, lithium, bases, organic material, halogens, metal acetylides, oxides and hydrides, metals (yields hydrogen gas), strong oxidizing and reducing agents and many other reactive substances.

10.6 Hazardous decomposition or byproducts: Highly improbable. Hazardous polymerization will not occur.

Section 11: Toxicological Information

11.1 Information on toxicological effects:

**Acute Exposure and Symptoms:**

Inhalation: Inhalation of dust may cause irritation of the respiratory tract. May cause allergic or asthma-like respiratory reactions.

Skin Contact: Direct contact with skin may cause burns, or even permanent skin damage. Short-term and repeat exposure may cause irritation, redness, pain, rashes, and drying and cracking of the skin.

Eye Contact: Direct contact with eyes may cause severe irritation, abrasions, burns, blurred vision, redness, conjunctivitis, ulcerations, tissue destruction and permanent eye damage including blindness.

Ingestion: Ingestion may cause severe irritation to the mouth, throat, and gastrointestinal tract, may cause vomiting, headaches, bleeding, and labored breathing. Other medical conditions such as perforation of the gastrointestinal tract, burns, and ulceration may lead to secondary infections or death. These effects may be delayed.

**Chronic Exposure:**

Prolonged exposure to wet mixture concrete may cause permanent injuries to the skin and eyes. Prolonged inhalation of dusts may cause damage to the respiratory tract.

Repeated inhalation of high levels of dusts, especially respirable crystalline silica (quartz) for periods as short as six months have caused acute silicosis. Acute silicosis is a rapidly progressive, incurable lung disease that is typically fatal. Not all individuals with silicosis will exhibit symptoms (signs) of the disease. However, silicosis can be progressive, and symptoms can appear at any time, even years after exposure has ceased. Symptoms of silicosis may include, but are not limited to, the following: shortness of breath; difficulty breathing with or without exertion; coughing; diminished work capacity; diminished chest expansion; reduction of lung volume; right heart enlargement and/or failure. Smoking may increase the risk of developing lung disorders, including emphysema and lung cancer. Persons with silicosis have an increased risk of pulmonary tuberculosis infection.

Several studies of persons with silicosis also indicate an increased risk of developing lung cancer, a risk that increases with the duration of exposure. Many of these studies do not account for confounding variables for lung cancer, especially smoking.
Section 10: Stability and Reactivity

Acute and Chronic Toxicity
Component Analysis: LD50/LC50
Portland Cement (65997-15-1): No data available
Calcium Carbonate (1317-65-3): No data available
Fly Ash (68131-74-8): Oral LD$_{50}$ Rat >2000 mg/kg (toxicity presented is for Ashes, residues (CAS no. 68131-74-8))
Silica, Quartz (Crystalline, Silica) (14808-60-7): LD$_{50}$ oral rat >500 mg/kg.

Component Carcinogenicity
Ready-mix concrete is not listed as a carcinogen by the International Agency for Research on Cancer (IARC), the National Toxicology Program (NTP), or the Occupational Safety and Health Administration (OSHA), the American Conference of Governmental Industrial Hygienists (ACGIH), or the State of California. In October 1996, an IARC Working Group re-assessing crystalline silica, a component of this product, designated crystalline silica as a carcinogen (Group 1). The NTP, ACGIH, and the State of California have listed crystalline silica (respirable size) as a known human carcinogen. This information is based on sufficient evidence of carcinogenicity in certain experimental animals and on selected epidemiological studies of workers exposed to crystalline silica.

<table>
<thead>
<tr>
<th>Substance Name</th>
<th>IARC</th>
<th>NTP</th>
<th>ACGIH</th>
<th>OSHA</th>
<th>NIOSH</th>
<th>California Prop 65.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Portland Cement (65997-15-1)</td>
<td>--</td>
<td>--</td>
<td>A4</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Calcium Carbonate (1317-65-3)</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Fly Ash (68131-74-8)</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Silica, Quartz (Crystalline, Silica) (14808-60-7)</td>
<td>G1</td>
<td>G2</td>
<td>A2</td>
<td>GS</td>
<td>Listed</td>
<td>YES (b)</td>
</tr>
</tbody>
</table>

1. "--" – Not Listed
2. OSHA - Group 5: OSHA Select Carcinogen
3. IARC - Group 1: Carcinogenic to humans
4. NTP - Group 2: Reasonably Anticipated to be Human Carcinogens (R)
5. ACGIH –A2: Suspected Human Carcinogen, A4: Not Classifiable as Human Carcinogen
6. Fly Ash is a byproduct from combustion of coal and thus may contain a number of trace chemicals including silicates and metals. Some of the components may be suspected or known carcinogens.
7. California Prop. 65 Components: WARNING! This product contains a chemical known to the State of California to cause Cancer: Crystalline Silica.

Specific Target Organ Toxicity Repeat Exposure – Respiratory System
Inhalation of high levels of dusts, especially respirable crystalline silica (quartz), for periods as short as six months have been known to cause acute silicosis. Silicosis is a rapidly progressive, incurable lung disease can be fatal. Symptoms of silicosis may include, but are not limited to, the following: shortness of breath; difficulty breathing with or without exertion; coughing; diminished work capacity; diminished chest expansion; reduction of lung volume; right heart enlargement and/or failure.

Skin Sensitizer
Some components of this product may cause skin sensitization: Portland Cement and Trace metals found in fly ash.
Material Name: Ready-Mix Concrete (wet, unhardened concrete)

Section 12: Ecological Information (non-mandatory)

12.1 Ecotoxicity:

General Product Information: No information is available for this specific product; however, precautions should be taken to avoid release to the environment or aquatic environment. Due to the caustic pH of the product, a possible rise in pH may occur if released into bodies of water which could affect aquatic lifeforms in the immediate vicinity of the release. Fly Ash may be toxic to aquatic life depending on composition of individual hazardous constituents.

Component Analysis - Ecotoxicity: No ecotoxicity data are available for this product's components.

Environmental Fate: No information available for the product.

Section 13: Disposal Considerations (non-mandatory)

13.1 Waste treatment methods:

General Product Information: Whatever cannot be saved or recovered for recycling should be disposed of according to state and local regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

Section 14: Transport Information (non-mandatory)

US DOT Information

IMDG

IATA

Not Regulated

Not Regulated

Not Regulated

Section 15: Regulatory Information (non-mandatory)

15.1 Safety, health, and environmental regulation:

US Federal Regulations

General Product Information: All components are on the U.S. EPA TSCA Inventory List. Portland Cement and crystalline silica are exempt from reporting under the inventory update rule.

Component Analysis: Some ingredients within components of this product are listed under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65), or CERCLA (40 CFR 302.4).

SARA 311/312 Tier II Hazard Ratings:

<table>
<thead>
<tr>
<th>Hazard</th>
<th>Acute Health</th>
<th>Chronic Health</th>
<th>Fire Hazard</th>
<th>Reactivity Hazard</th>
<th>Sudden Release of Pressure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes; skin and eye irritant</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes; Acids.</td>
<td>No</td>
</tr>
</tbody>
</table>

State Regulations

General Product Information: Other state regulations may apply. Check individual state requirements.

California Prop. 65 Components: WARNING! This product contains a chemical known to the State of California to cause Cancer: Crystalline Silica

Component Analysis – WHMISIDL:

<table>
<thead>
<tr>
<th>Component</th>
<th>EINECS/EC</th>
<th>CAS</th>
<th>Minimum Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Silica, Quartz (Crystalline, Silica)</td>
<td>231-545-4</td>
<td>14808-60-7</td>
<td>1%</td>
</tr>
</tbody>
</table>

Additional Regulatory Information

General Product Information: No additional information available.
Component Analysis – Inventory:

<table>
<thead>
<tr>
<th>Component</th>
<th>EINECS/EC</th>
<th>CAS</th>
<th>TSCA</th>
<th>CAN</th>
<th>EC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Portland Cement</td>
<td>266-043-4</td>
<td>65997-15-1</td>
<td>Yes</td>
<td>DSL</td>
<td>EINECS</td>
</tr>
<tr>
<td>Calcium Carbonate</td>
<td>207-439-9</td>
<td>1317-65-3</td>
<td>Yes</td>
<td>DSL</td>
<td>EINECS</td>
</tr>
<tr>
<td>Fly Ash (1)</td>
<td>268-627-4</td>
<td>68131-74-8</td>
<td>Yes</td>
<td>DSL</td>
<td>EINECS</td>
</tr>
<tr>
<td>Silica, Quartz (Crystalline, Silica)</td>
<td>231-545-4</td>
<td>14808-60-7</td>
<td>Yes</td>
<td>DSL</td>
<td>EINECS</td>
</tr>
</tbody>
</table>

1. Information presented is for Ash residues 68131-74-8. Fly ash contains many components that may or may not be listed in these inventories.

Section 16: Other Information

Disclaimer: Supplier gives no warranty of merchantability or of fitness for a particular purpose. Any product purchased is sold on the assumption the purchaser will make his own tests to determine the quality and suitability of the product. Supplier expressly disclaims any and all liability for incidental and/or consequential property damage arising out of the use of this product. No information provided shall be deemed to be a recommendation to use any product in conflict with any existing patent rights. Read the Safety Data Sheet before handling product.

Key to Abbreviations and Acronyms:

ACGIH: American Conference of Governmental Industrial Hygienists
ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road
CLP: Classification, Labelling, and Packaging
DNEL: Derived no effect level
DSL: Canada’s Domestic Substances List
EC: European Community
EEC: European Economic Community
EINECS: European Inventory of Existing Commercial Chemical Substances
EPA: Environmental Protection Agency
EU: European Union
GHS: Globally Harmonized System of classification and labelling of chemicals
IARC: International Agency for Research on Cancer
IATA: International Air Transport Association
ATA-DGR: Dangerous Goods Regulations by the International Air Transport Association
ICAO: International Civil Aviation Organization
ICAO-TI: Technical Instructions by the International Civil Aviation Organization (ICAO)
IMDG: International Maritime Code for Dangerous Goods
IP: Inhalable Particles
LC50: Lethal concentration in air fatal to 50 percent of test animals
LD50: Lethal dose by mouth or other route to 50 percent of test animals
LDLo: Lowest lethal dose
NIOSH: National Institute for Occupational Safety and Health
NJTSR: New Jersey Trade Secret Registry
NOEC: No observed effects
NOS: Not Otherwise Specified
NTP: National Toxicology Program
OSHA: Occupational Safety and Health Administration (USA)
PNEC: Predicted no effect concentration
Material Name: Ready-Mix Concrete (wet, unhardened concrete)

**Section 16: Other Information**

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PPM</td>
<td>Parts per million</td>
</tr>
<tr>
<td>R</td>
<td>Respirable Particles</td>
</tr>
<tr>
<td>RID</td>
<td>Regulations Concerning the International Transport of Goods by Rail</td>
</tr>
<tr>
<td>STEL</td>
<td>Short term exposure limit</td>
</tr>
<tr>
<td>T</td>
<td>Total Dust</td>
</tr>
<tr>
<td>TLV</td>
<td>Threshold Limit Value</td>
</tr>
<tr>
<td>TSCA</td>
<td>Toxic Substance Control Act</td>
</tr>
<tr>
<td>TWA</td>
<td>Time weighted average</td>
</tr>
</tbody>
</table>

**This is the end of SDS - Ready-Mix Concrete (wet, unhardened concrete)**