

# GRAVES CONCRETE



## Ready Mixed Concrete - Safety Data Sheet

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### Section 1: Identification

**Product Name:** Ready Mixed Concrete

**Synonyms:** Concrete, Freshly Mixed Concrete, Portland Cement Concrete, Grout, Flowable Fill, Colored Concrete, Fiber Reinforced Concrete, Shotcrete.

**Product Use:** A structural material used in public and private construction projects.

**Manufacturer:**

Graves Concrete  
PO Box 680 /147 Gardner Rd  
East Templeton, MA 01438  
978-939-5712  
www.gravesconcrete.com

**Emergency Telephone Number:**

978-939-5712 x 1

### Section 2: Hazards Identification



Skin Corrosion, Irritation and Sensitivity – Category 1

Serious Eye Damage and Irritation – Category 1

Specific Target Organ Toxicity (single exposure) – Category 3

Specific Target Organ Toxicity (repeated exposure) – Category 2

**Signal Word:** Danger

**Hazard Statement:**

- Wet Concrete causes serious alkali burns to skin and severe damage to eyes.
- Dust from hardened concrete may cause skin, eye and lung irritation and causes damage to organs (lung/respiratory system) with prolonged or repeated exposure.

**Precautionary Statements and Prevention:**

- Do not handle wet concrete until after reading and acknowledging all safety precautions.
- Wear protective clothing, impermeable gloves and footwear and safety glasses when working with fresh concrete. Immediately wash with water any areas that come directly in contact with fresh concrete. Wash all protective clothing and gear of wet concrete immediately after use.
- Do not breathe in dust and only saw, cut or grind hardened concrete with proper ventilation.
- When performing any cutting of dry concrete wear a dust control mask as well as gloves and safety glasses and protective clothing. Wash any exposed skin with water when work is completed.

**Response:**

- If exposed or concerned: Call a poison center or doctor/physician and get medical attention.
- If swallowed: Rinse mouth. Do NOT induce vomiting.
- If on skin or hair: Rinse carefully with water for several minutes. Wash contaminated clothing before reuse.
- If in eyes: Rinse carefully with water. Remove contact lenses if applicable. Continue rinsing.
- If inhaled: Remove victim to fresh air and keep at resting position comfortable for breathing.

**Disposal:** Dispose of Ready Mixed Concrete in accordance with all local, regional and national regulations.

**Storage:** N/A

**Hazards not otherwise classified:** None known

**Section 3: Composition/Information on Ingredients**

Ingredient Name	%	CAS Number
Aggregates	>35	Varies
Portland Cement	>25	65997-15-1
Fly Ash	0 – 30	68131-74-8
Water	>5	7732-18-5
Crystalline Silica (Quartz)	>0.1	14808-60-7

**Trace Elements:** Ready Mixed Concrete materials are mined from the earth; therefore, trace amounts of naturally occurring elements may be detected during chemical analysis of these materials.

**Chemical Admixtures:** may be present in ranges of less than 1%.

**Section 4: First-Aid Measures**

<b>Eye Contact:</b>	Rinse eyes thoroughly with water for at least 15 minutes including under the eyelids to remove all particles. Remove contact lenses. Seek medical attention for abrasions and burns.
<b>Skin Contact:</b>	Immediately remove contaminated clothing and wash with cool water and a mild soap. Seek medical attention for: rash, burns, irritation, dermatitis and prolonged unprotected exposures to wet concrete.
<b>Inhalation:</b>	Move person to fresh air. Seek medical attention for discomfort or if coughing does not subside.
<b>Ingestion:</b>	Ingestion is not a common exposure; however if swallowed, do not induce vomiting. Seek medical attention or contact poison control center immediately.
<b>Most important over-exposure signs, symptoms and effects both acute and delayed</b>	Eye contact with wet concrete may cause: redness, pain and watering which left untreated can result in severe burns, injury and blindness. Skin contact with wet concrete may cause: irritation, redness, blistering and further injury due to caustic burns. Inhalation of silica dust over prolonged periods of time can cause lung damage and silicosis with such symptoms as: shortness of breath, difficulty breathing, and coughing and chest pain. Ingestion may cause stomach pains.
<b>Indication of immediate attention and special treatment needed</b>	Seek medical attention and observation for all severe unprotected direct contact with wet concrete and extended exposure to respirable dust.

**Section 5: Fire-Fighting Measures**

Suitable extinguishing media	Use an extinguishing agent suitable for the surrounding fire.
Unsuitable extinguishing media	None known.
Specific hazards arising from the material	Non-combustible. Non-flammable. No specific fire or explosion hazard.
Hazardous thermal decomposition products	Material is not combustible.
Special protective actions for fire-fighters	No special protective action is required.
Special protective equipment for fire-fighters	No special equipment is required beyond standard protective personal gear.

**Section 6: Accidental Release Measures**

<b>General:</b>	Place spilled material into container. Avoid contact with skin. Wear appropriate protective equipment as described in section 8. Scrape wet concrete and place in container. Allow material to dry solidly before disposal. Do not wash concrete down sewage and drain systems or into bodies of water (e.g. streams).
<b>Waste Disposal Method:</b>	Dispose of concrete according to Federal, State, Provincial and Local laws.

### Section 7: Handling and Storage

<b>Usage:</b>	Cutting, crushing or grinding hardened concrete or other crystalline silica bearing materials will release respirable crystalline silica. Use all appropriate measures of dust control or suppression, and Personal Protective Equipment (PPE) described in section 8 below.
<b>Storage Temperature:</b>	Unlimited.
<b>Clothing:</b>	Promptly remove and launder clothing that is wet with concrete. Thoroughly wash skin after exposure to wet concrete.

### Section 8: Exposure Controls/Personal Protection

<b>Engineering Controls:</b>		Use local exhaust or general dilution ventilation or other suppression methods to maintain dust levels below exposure limits.
<b>Personal Protective Equipment (PPE)</b>	<i>Respiratory Protection:</i>	Under normal conditions no respiratory protection is required. Wear a NIOSH approved respirator that is properly fitted and in good condition when exposed to dust above exposure limits.
	<i>Eye Protection:</i>	Wear ANSI approved glasses or safety goggles when handling wet concrete to prevent contact with eyes. Wearing contact lenses when working with wet concrete is not recommended.
	<i>Skin Protection:</i>	Wear gloves, boot covers and protective clothing impervious to water to prevent skin contact. Remove clothing and protective equipment that become saturated with wet concrete and immediately wash exposed areas.

### Section 9: Physical and Chemical Properties

<b>Physical State:</b>	Semi-fluid, flowable, moldable, granular paste.	<b>Vapor Pressure:</b>	N/A
<b>Evaporation rate:</b>	N/A	<b>Freezing point:</b>	N/A
<b>Appearance:</b>	Most commonly gray in color	<b>Vapor Density:</b>	N/A
<b>ph (in water)</b>	12 - 13	<b>Viscosity:</b>	Varies
<b>Odor:</b>	None	<b>Specific Gravity:</b>	1.9 to 2.4
<b>Boiling point:</b>	N/A	<b>Solubility in Water</b>	Slightly (0.1 – 1.0%)

### Section 10: Stability and Reactivity

<b>Stability:</b>	Hardened concrete is stable. Avoid contact with incompatible materials.
<b>Incompatibility:</b>	Wet concrete is alkaline and is incompatible with: acids, ammonium salts and aluminum metal. Cement dissolves in hydrofluoric acid, producing corrosive silicon tetrafluoride gas. Cement reacts with water to form silicates and calcium hydroxide. Silicates react with powerful oxidizers such as: fluorine, boron trifluoride, chlorine, trifluoride, manganese trifluoride and oxygen difluoride.
<b>Hazardous Polymerization:</b>	None
<b>Hazardous Decomposition:</b>	None

### Section 11: Toxicological Information

<b>Crystalline Silica Carcinogenic Potential:</b>	Concrete frequently contains crystalline silica in concentrations greater than 0.1 percent, principally contributed by the aggregates. Respirable crystalline silica is classified by the International Agency for Research on Cancer as a known human carcinogen and by the National Toxicology Program as "reasonably anticipated to be a carcinogen". Crystalline silica in wet concrete is not respirable and does not pose a hazard when the concrete is in its plastic or unhardened state. Once concrete has hardened, airborne dust generated by: grinding, sawing, drilling, breaking, etc., can lead to potentially hazardous exposures to workers and appropriate respiratory protection precautions should be taken, (see Section 8 Exposure Controls/Personal Protection).
<b>Wet Concrete Carcinogenicity:</b>	None Known

### Section 12: Ecological Information

Seek information from appropriate regulatory agencies.

### Section 13: Disposal Considerations

#### **Waste Disposal Instructions:**

See Section 7 for Handling Procedures. See Section 8 for Personal Protective Equipment recommendations.

#### **Disposal of Contaminated Containers or Packaging:**

Dispose of contents/container in accordance with local/regional/national/international regulations

### Section 14: Transport Information

This product is not classified as a Hazardous Material under United States Department of Transportation regulations.

### Section 15: Regulatory Information

**OSHA/MSHA Hazard Communication:** This product is considered by OSHA/MSHA to be a hazardous chemical and should be included in the employer's hazard communication program.

**CERCLA/SUPERFUND (Comprehensive Environmental Response, Compensation, and Liability Act of 1980):**

This product is not listed as a CERCLA hazardous substance.

Seek information from appropriate regulatory agencies.

### Section 16: Other Information

This SDS (Section 1-16) was revised on June 1, 2016.

This SDS version meets HazCom 2012

An electronic version of this SDS (Safety Data Sheet) is available at: [www.gravesconcrete.com](http://www.gravesconcrete.com) under the Documents tab as: Ready Mixed SDS.

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