

# SAFETY DATA SHEET



## Section 1:

## IDENTIFICATION

Product Name:	Ready-Mix Concrete
Generic ID:	Ready-Mix Concrete, Freshly-Mixed Unhardened Concrete
Usage and Restrictions:	Concrete is widely used as a structural component in many construction applications. This SDS covers many types of concrete. Individual composition of hazardous constituents may vary between types / different mix designs of concrete.
Supplier Details:	<b>Heritage Concrete</b> 270 Presidential Drive, Suite 200 Wilmington, DE 19807 <b>Contact: Lisa Simpson, 302.985.1134 (cell)</b>
Emergency Phone #:	302.777.1235

## Section 2:

## HAZARD(S) IDENTIFICATION

GHS Label Elements:



Hazard Statements:

**WARNING:**

Corrosive-causes severe burns. Toxic/harmful by inhalation. (May contain crystalline silica.) Use proper engineering controls, work practices, and personal protective equipment (PPE) to prevent exposure to wet or dry product. Read SDS for details.

Unhardened concrete is an odorless semi-fluid, flowable, granular paste of varying color and texture. It is not combustible or explosive. 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

Hazardous Components	CAS No.	OSHA PEL	ACGffi TLV-TWA	Approx. % By Weight
Portland Cement	65997-15-1	5mg/m3	10mg/m3	15.0-20.0%
Silicon Dioxide Crystalline (SiO <sub>2</sub> )	14808-60-7	0.1 mg/m3	0.1 mg/m3	40.0-50.0%
Limestone	1317-65-3	5 mg/m3	10 mg/m3	40.0-50.0%

## Section 4: EMERGENCY & FIRST AID PROCEDURES

### Description of Necessary First Aid Measures:

Route	Effect of Overexposure	Recommended Treatment
Eye Contact	Irritation, redness, tearing	Flush with large amounts of water - seek medical attention if condition persists.
Inhalation	Irritation of respiratory tract &/or lungs	Remove victim to dust free environment - seek medical attention if condition persists.
Skin Contact	Burning sensation	Wash exposed area(s) of body with soap & water - seek medical attention if condition persists.
Ingestion	N/A	N/A



## Section 5:

## FIRE & EXPLOSION DATA

Flash Point & Method:	N/A
Auto Ignition Temp:	N/A
Flammable Limits:	LEL: N/A UEL: N/A
Extinguishing Agents:	N/A
Special Fire Fighting Procedures:	N/A
Hazardous & Thermal Decomposition Products:	None
Unusual Fire & Explosion Hazards:	None

## Section 6:

## ACCIDENTAL RELEASE MEASURES

Steps to be taken in event of release or spill:	Clean up spills using a dustless method (vacuum w/HEPA filter or wet sweeping). Place in a lidded container for disposal.
Waste disposal method	Place spilled material into a contained area and allow wet unhardened concrete to harden and dispose in a landfill as common solid waste. 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.

## Section 7:

## HANDLING AND STORAGE

Precautions to be taken in handling and storage	Use good housekeeping techniques. Hose down work area to keep dust at a minimum. Keep area well ventilated. Avoid excessive contact with skin. Store off of ground in dry area.
Other Precautions	Use a dustless system for storage and handling to assure that airborne dust does not exceed the OSHA PEL.



## Section 8:

## CONTROL MEASURES

### **Respiratory Protection:**

When exposed to dust from cutting, grinding, crushing, or drilling hardened concrete or concrete products above recommended limits, wear a suitable NIOSH –approved respirator with protection factor appropriate for the level of exposure. For emergency or non-routine operations (e.g., confined spaces), additional precautions or equipment may be required. Respirator use must comply with applicable MSHA or OSHA standards.

### **Local Exhaust Ventilation:**

When cutting, grinding, crushing, or drilling hardened concrete, provide general or local exhaust ventilation systems as needed to maintain airborne dust concentrations below the OSHA PELs, MSHA PELs, and ACGIH TLVs.

**Other:** Respirable dust and quartz levels from hardened concrete cutting, grinding, crushing or drilling operations should be monitored regularly. Dust and quartz levels in excess of applicable OSHA PELs, MSHA PELs, and ACGIH TLVs should be reduced by all feasible engineering controls.

**Mechanical (General):** See above recommendations. **(Special):** None reported.

### **Protective Gloves:**

When handling wet unhardened concrete, wear water proof gloves to prevent skin contact. Wash thoroughly with water and a pH-neutral soap after handling.

### **Eye Protection:**

When cutting, grinding, crushing, or drilling hardened concrete wear safety glasses with side shields or dust goggles in dusty environments. When there is a splash hazard working with wet unhardened concrete, wear safety glasses with side shields or goggles.

### **Other Protective Clothing or Equipment:**

Wear suitable protective clothing, as needed, to prevent skin contact with unhardened concrete. This includes waterproof boots and NIOSH-approved respirators when exposure exceeds applicable limits.

### **Work/Hygienic Practices:**

Contact with wet unhardened concrete, mortar, cement or cement mixtures can cause skin irritation, severe chemical burns, or serious eye damage. Avoid contact with eyes and skin. Wear waterproof gloves, a fully buttoned long-sleeved shirt, full-length trousers, and tight fitting eye protection when working with these materials.

If you have to stand in wet concrete, use waterproof boots that are tight at tops and high enough to keep concrete from flowing into them. If you are finishing concrete, wear waterproof knee pads to protect knees. Wash wet concrete, mortar, cement, or cement mixtures from your skin with fresh, clean water and a pH-neutral soap immediately after contact.

Indirect contact through clothing can be as serious as direct contact, so promptly rinse out wet concrete, mortar, cement or cement mixtures from clothing. Seek immediate medical attention if you have persistent or severe discomfort.

In case of eye contact, flush with plenty of water for at least 15 minutes. Consult a physician immediately. Avoid dust inhalation and direct contact with skin and eyes. Wash contaminated skin before eating, drinking, smoking, lavatory use and before applying cosmetics.

KEEP OUT OF REACH OF CHILDREN



## Section 9:

## PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Light gray granular mixture.
Odor:	Odorless.
Melting Point:	N/A
Boiling Point:	N/A
Evaporation Rate (Butyl-Acetate = 1):	N/A
Vapor Pressure (mm/hg):	N/A
Vapor Density (Air = 1):	N/A
Solubility in Water:	Slight (0.01 - 1.0%)
Reactivity in Water:	N/A
Specific Gravity (B20 = 1):	2.50 - 2.80

## Section 10:

## STABILITY AND REACTIVITY

Chemical Stability:	Stable.
Hazardous Polymerization:	Will not.
Conditions to avoid:	N/A
Incompatibility (materials to avoid):	Hydrofluoric Acid-silica will dissolve and produce a corrosive gas silicon tetrafluoride (SiFa <sub>4</sub> )



**Section 11: TOXICOLOGICAL INFORMATION**

Routes of Entry	Inhalation-X	Absorption-X	Ingestion-N/A
Health Hazards	Acute-X	Chronic-X	
Comments	Acute: Wet plastic, unhardened concrete can dry skin and/or cause alkali burns Chronic: Repeated or prolonged exposure/inhalation of crystalline silica may result in silicosis.		
Carcinogenity	NTP-N/A	IARC-N/A	OSHA Regulated-N/A
Comments	Evidence indicates that crystalline silica is a potential occupational carcinogen		
Signs & Symptoms of Over-exposure	Respiratory discomfort or irritation. Burning sensation on skin.		
Medical Conditions Generally Aggravated by Exposure	Asthma. Hypersensitive individuals may develop an allergic dermatitis.		

**Section 12: ECOLOGICAL INFORMATION**

**Ecotoxicity:**

Fresh concrete is abrasive and alkaline.  
 -If swallowed it can cause burns to the mouth, esophagus and stomach.  
 -If in contact with the skin it can cause burns and abrasions. Prolonged or frequent contact can cause irritation or dermatitis.  
 -If in contact with the eyes, it can cause irritation to the eyelids, cornea (conjunctivitis) and lesions to the eyeball.

**Section 13: DISPOSAL CONSIDERATIONS**

Waste Disposal Methods: Product may be salvaged if not contaminated or disposed of using approved solid waste disposal method in accordance with all State, Federal and Local regulations.

**Section 14: TRANSPORTATION INFORMATION**

USDOT Class: Uncontaminated ready mixed concrete does not meet any hazardous material class definition found in Title 49 Code of Federal Regulations Part 173.



## Section 15:

## REGULATORY INFORMATION

### Safety, Health and Environmental Regulations/ Legislations Specific For The Chemical:

#### OSHA/MSHA Hazard Communication:

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

CERCLA/SUPERFUND: This product is not listed as a CERCLA hazardous substance.

#### EPCRA SARA Title III:

This product has been reviewed according to the EPA Hazard Categories promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 and is considered a hazardous and a delayed health hazard.

#### EPCRA SARA Section 313:

This product may contain substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

#### RCRA

If discarded in its hardened form, this product would not be a hazardous waste either by listing characteristic. However, under RCRA, it is the responsibility of the product user to determine at the time of disposal, whether a material containing the product or derived from the product should be classified as a hazardous waste.

#### TSCA:

Portland Cement and crystalline silica are exempt from reporting under the inventory update rule.

#### California Proposition 65:

Crystalline silica and Chromium (hexavalent compounds) are substances known by the State of California to cause cancer.

WHMIS/DSL: Products containing crystalline silica and calcium carbonate are classified as D2A, E and are subject to WHMIS requirements.

## Section 16:

## OTHER INFORMATION

Date of Preparation:	05-30-15
Expiration Date:	None
Version:	1.0
Revision Date:	N/A

Disclaimer: We believe the statements, technical information and recommendations contained herein are reliable, but are given without warranty or guarantee of any kind. In particular, the data furnished in this sheet do not address hazards that may be posed by other materials mixed with this product. Users should review other relevant material safety data sheets before working with this product. Inexperienced product users should obtain proper training before using this product. It is the user's responsibility to satisfy oneself as to the suitability and completeness of this information for the user's own particular use.

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