

SAFETY DATA SHEET

Revision Date 5/15/15

1. PRODUCT AND COMPANY IDENTIFICATION

1.1 Product identifiers

Product name: Ready Mixed Concrete

Synonyms: Concrete Ready Mix, Portland Cement Concrete, Ready Mix Stucco, Ready Mix Grout, Ready Mix, Concrete, Freshly Mixed Concrete, Colloidal Concrete, Permeable Concrete, Shotcrete, Gunitite, Colored Concrete, Flowable Fill, Roller-Compacted Concrete, Fiber Reinforced Concrete

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses: Concrete is widely used as a structural component in construction applications

1.3 Details of the supplier of the safety data sheet

Company: USC Technologies
331 N Main St
Euless, Texas 76039
USA

Telephone: +1 817-835-4105

1.4 Emergency telephone number

Emergency Phone #: (800) 424-9300

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Skin corrosion/irritation (Category 1B), H314

Serious eye damage/eye irritation (Category 1), H318

Carcinogenicity (Category 1B), H350

Specific target organ toxicity, single exposure (Category 2), H371

Specific target organ toxicity, repeated exposure (Category 2) H373

2.2 GHS Label elements, including precautionary statements

Pictogram:



Signal word: **Warning**

Hazard statement(s)

H314 Causes skin burns and eye damage

H318 Causes serious eye damage

H350 May cause cancer

H371 May cause damage to organs

H373 May cause damage to organs through prolonged or repeated exposure

Precautionary statement(s)

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

P260 Avoid breathing dust

P270 Do not eat, drink or smoke when using this product.

P281 Use personal protective equipment as required.

P301 + P330 + P331 If swallowed, Rinse mouth. Do not induce vomiting

- P303 + P361 + P353 If on skin (or hair) remove/take off immediately all contaminated clothing. Rinse skin with water/shower
- P305 + P351 + P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P308 + P313 If exposed or concerned: Get medical advice/ attention.
- P309 + P311 If exposed or you feel unwell: Call a poison center or doctor/physician

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

None

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	CAS number	%
Aggregate (crushed stone, sand, gravel, expanded shale) Quartz (crystalline silica)	Mixture 14808-60-7	60-95 >1
Hydraulic Cement(s) Portland and/or Slag Cement	Mixture 65997-15-1	3-20
Pozzolan Artificial Fly Ash Silica Fume	Mixture 38131-74-8 69012-64-2	0-11
Water	7732-18-5	6-13

4. FIRST AID MEASURES

4.1 Description of first aid measures

If inhaled

Dusts from hardened product may irritate the mouth, nose, throat and lungs. Remove person to fresh air. Dust in throat and nasal passages should clear spontaneously. Contact a physician if irritation persists or later develops.

In case of skin contact

Wash off with soap and plenty of water. Remove contaminated clothing. Contact physician if irritation persists

In case of eye contact

Immediately flush eye(s) with plenty of clean water for at least 15 minutes, while holding the eyelid(s) open. Occasionally lift the eyelid(s) to ensure thorough rinsing. Beyond flushing, do not attempt to remove material from eye(s). Contact a physician if irritation persists or later develops.

If swallowed

If person is conscious do not induce vomiting. Give large quantity of water and get medical attention. Never attempt to make an unconscious person drink.

4.2 Most important symptoms and effects, both acute and delayed

Contact with wet product may result in chemical (caustic) burns and eye injury which may be progressive and could cause blindness. Wet product may result in chemical burns to the skin. Dust may irritate the skin and respiratory tract. Breathing silica-containing dust for prolonged periods in the workplace can cause lung damage and a lung disease called silicosis. Symptoms of silicosis may include (but are not limited to) 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.

4.3 Indication of any immediate medical attention and special treatment needed

Not all individuals with silicosis will exhibit symptoms of the disease. However, silicosis can be progressive, and symptoms can appear at any time, even years after exposures have ceased. Persons with silicosis have an increased risk of pulmonary tuberculosis infection.

5. FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media

This product is not flammable. Use extinguishing agents suitable for surrounding materials.

5.2 Unsuitable extinguishing media

None

5.3 Special hazards arising from the substance or mixture

Contact with powerful oxidizing agents may cause fire and/or explosions (see section 10 of SDS).

5.4 Advice for firefighters

No unusual fire or other hazards exist.

5.5 Further information

The presence of this material in a fire does not hinder the use of any standard extinguishing medium. Use extinguishing medium for surrounding fire.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Avoid contact with skin. Wear appropriate protective equipment as described in Section 8.

6.2 Environmental precautions

Prevent further leakage or spillage. Do not let product enter drainage systems where it can harden and clog flow.

6.3 Methods and materials for containment and cleaning up

Scrape wet concrete and place in container. Allow material to dry or solidify before disposal.

6.4 Reference to other sections

For disposal see section 13.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Respirable crystalline silica-containing dust may be generated during processing, handling, and storage. Use all appropriate measures of dust control or suppression, and Personal Protective Equipment (PPE) described in Section 8.

7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place.

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Component	OSHA/MSHA PEL	ACGIH TLV	NIOSH REL
Portland Cement	15 (total dust) 5 (respirable fraction)	10 (respirable fraction)	10 (total dust) 5 (respirable fraction)
Respirable dust containing silica	10 ÷ (%silica + 2)	Use Respirable Silica TLV	Use Respirable Silica TLV
Respirable Crystalline Silica (quartz)	NE - Use respirable dust PEL	0.025	0.05

Respirable Tridymite and Cristobalite (other forms of crystalline silica)	1/2 of OSHA/MSHA respirable dust PEL	0.025	0.05
Amorphous Silica	20 mppcf (80 mg/m ³ /percent silica)	NE	6
Iron Oxide	10 (total dust)	5 (respirable fraction)	5 (respirable fraction)
Magnesium Oxide	15 (total dust)	10 (inhalable fraction)	NE
Aluminum Oxide	15 (total dust)	10 (total dust)	15 (total dust)
Manganese Oxide	5 (Respirable) 5 (as Mn)	0.2 (as Mn)	5 (Respirable) 1 (as Mn)
Particulates Not Otherwise Classified	15 (total dust) 5 (respirable fraction)	10 (inhalable fraction) 3 (respirable fraction)	NE

8.2 Exposure controls

Appropriate engineering controls

Minimize splashing through concrete discharge flow rates. While cutting, crushing or grinding hardened concrete, minimize dust generation through suppression and ventilation methods.

8.3 Personal protective equipment

Eye/face protection

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or 29 CFR 1926.103.

Skin protection

Waterproof gloves, rubber boots, and clothing sufficient to protect skin from contact with wet product should be worn. Clothing saturated from contact with wet product should be removed promptly to prevent continued contact with skin. After working with product, workers should clean their skin with soap and water. Clean clothing should be worn after showering.

Respiratory protection

Not required when working with wet product. Activities that generate dust from hardened dry product require the use of a NIOSH approved dust respirator for the exposure circumstances involved

Control of environmental exposure

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance:	Semi-fluid, flowable paste
Color:	Usually grey
Odor:	Odorless
pH:	12 - 13
Melting/Freezing point:	No data available
Initial boiling point & range:	No data available
Flash point:	No data available
Evaporation rate:	No data available
Flammability (solid, gas):	No data available

Upper/Lower flammability: or explosive limits	No data available
Vapour pressure:	No data available
Vapour density:	No data available
Specific Gravity:	1.7 – 2.4
Water solubility:	Slight: 0.1% - 1%
Auto-ignition temp.:	No data available
Decomposition temp.:	No data available
Explosive properties:	No data available
Oxidizing properties:	This substance is classified as an oxidizer with the Category 3

9.2 Other safety information

No data available

10. STABILITY AND REACTIVITY

10.1 Reactivity

Not reactive under normal use.

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

No data available

10.4 Conditions to avoid

Exposure to moisture.

10.5 Incompatible materials

Unhardened concrete is alkaline and is incompatible with acids, ammonium salts and aluminum metals. Portland cement dissolves in hydrofluoric acid and produces silicon tetrafluoride gas. Portland cement reacts with water to form silicates which in turn react with powerful oxidizers such as fluorine, boron trifluoride, chlorine trifluoride, manganese trifluoride and oxygen difluoride.

10.6 Hazardous decomposition products

No data available

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity

Not classified

Skin corrosion/irritation

Causes severe skin burns

Serious eye damage/eye irritation

Causes serious eye damage

Respiratory or skin sensitization

No data available

Germ cell mutagenicity

No data available

Carcinogenicity

May cause cancer (inhalation)

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure

May cause respiratory irritation

Specific target organ toxicity - repeated exposure

May causes damage to organs (lungs, respiratory system) through prolonged or repeated exposure (inhalation)

Aspiration hazard

No data available

12. ECOLOGICAL INFORMATION

12.1 Toxicity

No data available

12.2 Persistence

No data available

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

No data available

12.5 Other adverse effects

No data available

13. DISPOSAL CONSIDERATIONS

Material can be retained until it hardens, and then disposed of as solid waste. Place contaminated materials in appropriate containers and dispose of in a manner consistent with applicable federal, state, and local regulations. Prevent from entering drainage, sewer systems, and unintended bodies of water. It is the responsibility of the user to determine, at the time of disposal, whether product meets criteria for hazardous waste. Product uses, transformations, mixture and processes, may render the resulting material hazardous.

14. TRANSPORT INFORMATION

DOT (US)

UN number: Not regulated

Proper shipping name: Not regulated

Packing Group: Not Regulated

Hazard Class: Not regulated

15. REGULATORY INFORMATION

15.1 TSCA Status

Not listed

15.2 §302 Components

Not listed

15.3 §304 Components

Not listed

15.4 §313 Components

Not listed

15.5 California Prop. 65

This product contains a chemical (crystalline silica, chromium, cobalt, nickel) known to the State of California to cause cancer.

16. OTHER INFORMATION

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