



CEMENT &amp; CONCRETE PRODUCTS™

## C1: Portland Cement Based Concrete Products

### SAFETY DATA SHEET

(Complies with OSHA 29 CFR 1910.1200)

Quikrete High Strength  
Concrete mix NO. 1101

### SECTION I: PRODUCT IDENTIFICATION

The QUIKRETE® Companies  
5 Concourse Parkway, Suite 1900  
Atlanta, GA 30328

Emergency Telephone Number  
INFOTRAC (800) 535-5053  
Information Telephone Number  
(800) 282-5828

SDS C1

Revision: Feb-18

| <b>QUIKRETE® Product Name</b>           | <b>Item #(s)</b>                                    |
|-----------------------------------------|-----------------------------------------------------|
| Fence Post Mix                          | 1005                                                |
| Fiber-Reinforced Concrete Mix           | 1006                                                |
| Crack Resistant Concrete Mix            | 1006-80                                             |
| Pro-Finish Crack Resistant Concrete Mix | 1006-68                                             |
| QUIKRETE 5000 Concrete Mix              | 1007                                                |
| QUIKRETE 6000 Concrete Mix              | 1007                                                |
| Pro-Finish QUIKRETE 5000                | 1007-85                                             |
| Lightweight Concrete Mix                | 1008                                                |
| Basic Concrete Mix                      | 1015                                                |
| Maximum Yield Concrete Mix              | 1100-80                                             |
| Concrete Mix                            | 1101-10, -20, -40, -60, -80, -90                    |
| Green Concrete Mix                      | 1101-63, -73                                        |
| B-Crete                                 | 1101-81                                             |
| Red-E-Crete Concrete mix                | 1101-91, -87; 1141-62, -63, -92, -93, Bulk NR810035 |
| Countertop Mix                          | 1106-80                                             |
| Form & Pour Concrete Mix                | 1120-80/NR810065                                    |
| Form & Pour Concrete Mix MS             | 1120-80/NR810065                                    |
| All-Star Concrete Mix                   | 1121                                                |
| Rip Rap                                 | 1129                                                |
| Rip Rap Scrim                           | 1134-80                                             |
| Handicrete Concrete Mix                 | 1141-59, -60, -80                                   |
| RiteMix Concrete                        | 1171-60                                             |
| Fiber Reinforced Deck Mix               | 1251-80, -81                                        |
| All-Star Crack Resistant Concrete Mix   | 1470-03                                             |
| All-Star 5000 Concrete Mix              | 1470-01                                             |
| FlowCrete 5000 (Mix 801)                | 8080026/NR80026                                     |
| Mix 801 Concrete Mix                    | NR81001                                             |

**Product Use:** Portland cement-based, aggregated products for general construction

SDS C1

QUIKRETE Companies, LLC

2/7/2018

See most current revision of this document at [www.QUIKRETE.com](http://www.QUIKRETE.com).

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**SECTION II - HAZARD IDENTIFICATION**

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**Hazard-determining components of labeling:** Silica, Portland cement

**2.1 Classification of the substance or mixture**

Carcinogen – Category 1A

Skin Corrosion – Category 1B

Eye Damage – Category 1

Skin Sensitization – Category 1B

Specific Target Organ Toxicity Repeat Exposure – Category 1

Specific Target Organ Toxicity: Single Exposure – Category 3

**2.2a Signal word DANGER!**

**2.2b Hazard Statements**

May cause cancer through chronic inhalation

Causes severe skin burns and serious eye damage

May cause an allergic skin reaction

Causes damage to lungs through prolonged or repeated inhalation

May cause respiratory irritation

Harmful if swallowed.

**2.2c Pictograms**



**2.2d Precautionary statements**

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

Wear impervious gloves, such as nitrile. Wear eye protection, and protective clothing.

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

Wash thoroughly after handling.

Use only in a well-ventilated area. Wear a NIOSH approved respirator (mask) such as N95 in poorly ventilated areas, when used for extended periods, when use is frequent, or when permissible exposure limits may be exceeded.

Do not breathe dust.

If swallowed: Rinse mouth. Do NOT induce vomiting.

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If inhaled: Remove person to fresh air and keep comfortable for breathing.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

If on skin (or hair): Remove immediately all contaminated clothing and wash before re-use. Rinse skin or hair with water.

If significant skin irritation or rash occurs: get medical advice or attention.

**Immediately seek medical advice or attention if symptoms are significant or persist.**

Store in a well-ventilated place. Keep container tightly closed.

Dispose of contents/containers in accordance with all regulations.

### **2.3 Additional Information**

The Portland cement in this product can cause serious, potentially irreversible damage to skin, eye, respiratory and digestive tracts due to chemical (caustic) burns, including third degree burns.

Burns from Portland cement may not cause immediate pain or discomfort. You cannot rely on pain to alert you to cement burns. Portland cement can cause dermatitis or sensitization. Therefore precautions must be taken to prevent all contact with Portland cement. Cement burns can become worse even after contact has ended. If there is contact with this product, immediately remove all product from body and thoroughly rinse with water. If you experience or suspect a cement burn or inflammation you should immediately see a health care professional.

Skin burns and irritation may be caused by brief exposure, though often are caused by extended exposure of 15 minutes, an hour, or longer. Interaction of Portland cement with water or sweat releases a caustic solution which produces the burns or irritation. Any extended exposure should be treated as though a burn has occurred until determined otherwise.

Skin contact with Portland cement can also cause inflammation of the skin, referred to as dermatitis. Signs and symptoms of dermatitis can include itching, redness, swelling, blisters, scaling, and other changes in the normal condition of the skin. Signs and symptoms of burns include the above and whitening, yellowing, blackening, peeling or cracking of skin.

The Portland cement in this product may cause allergic contact dermatitis in sensitized individuals. This overreaction of the immune system can lead to severe inflammation. Sensitization may result from a single exposure to the low levels of Cr (VI) in Portland cement or repeated exposures over months or years. Sensitization is long lasting and, after sensitization, even very small quantities can trigger the dermatitis. Sensitization is uncommon. Individuals who experience skin problems, including seemingly minor ones, are advised to seek medical attention.

**2.3a HNO3 – Hazards not otherwise classified:** Not applicable

**2.3b Unknown Acute Toxicity:** None

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**SECTION III - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION**

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| <b><u>Hazardous Components</u></b> | <b><u>CAS No.</u></b> | <b><u>% by Weight</u></b> |
|------------------------------------|-----------------------|---------------------------|
| Sand, Silica, Quartz               | 14808-60-7            | 60-100*                   |
| Portland Cement                    | 65997 15 1            | 10-30*                    |
| Fly Ash                            | 68131-74-8            | 5-10*                     |

\*The concentrations ranges are provided due to batch-to-batch variability.  
None of the constituents of this material are of unknown toxicity.

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**SECTION IV – FIRST AID MEASURES**

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**4.1 Description of the first-aid measures**

**General information:**

**After inhalation:** Remove person to fresh air. If breathing is difficult, administer oxygen. If not breathing, give artificial respiration. In case of unconsciousness, place patient stably in side position for transportation.

**After skin contact:** Wash skin with cool water and pH-neutral soap or a mild detergent. If significant skin irritation or rash occurs: get medical advice or attention.

**After eye contact:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

**After swallowing:** Do not induce vomiting. If conscious, have the victim drink plenty of water and call a physician immediately. Never give anything by mouth to an unconscious person.

**4.2 Most important symptoms/effects, acute and delayed**

**Inhalation:** May cause respiratory tract irritation. Causes damage to organs through prolonged or repeated inhalation. This product contains crystalline silica. Prolonged or repeated inhalation of respirable silica from this product can cause silicosis.

**Skin contact:** Skin burns and irritation may be caused by brief exposure, though often are caused by extended exposure of 15 minutes, an hour, or longer.

**Eye Contact:** Causes serious eye damage. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva.

**Ingestion:** May be harmful if swallowed. Ingestion may cause discomfort and/or distress, nausea or vomiting.

**4.3 Indication of immediate medical attention and special treatment needed:**

Immediately seek medical advice or attention if symptoms are significant or persist.

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**SECTION V - FIRE FIGHTING MEASURES**

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**5.1 Flammability of the Product:** Non-flammable and non-combustible

**5.2 Suitable extinguishing agents:** Treat for surrounding material

**5.3 Special hazards arising from the substance or mixture:** None

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**5.3a Products of Combustion:** None

**5.3b Explosion Hazards in Presence of Various Substances:** Non-explosive in presence of shocks

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**SECTION VI – ACCIDENTAL RELEASE MEASURES**

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**6.1 Personal precautions, protective equipment and emergency procedures:** Wear personal protective equipment (See section VIII). Keep unprotected persons away.

**6.2 Methods and material for containment and cleaning up:**

Do not allow to enter sewers/ surface or ground water. Dispose of unwanted materials and containers properly in accordance with all regulations.

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**SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND STORAGE**

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**7.1 Handling**

**Precautions for safe handling:** Ensure good ventilation/exhaustion at the workplace. **DO NOT BREATHE DUST.** In dusty environments, the use of an OSHA, MSHA or NIOSH approved respirator and tight fitting goggles is recommended. Wear appropriate PPE (See section 8). Do not mix with other chemical products, except as indicated by the manufacturer. Do not get in eyes, on skin or clothing. Good housekeeping is important to prevent accumulation of dust.

**7.2 Storage**

**Requirements to be met by storerooms and receptacles:** No special requirements.

**Information about storage in one common storage facility:** Not required.

**Further information about storage conditions:** Keep out of the reach of children. Keep container tightly closed and prevent exposure to humidity. Do not allow water to contact the product until time of use to preserve product utility.

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**SECTION VIII – EXPOSURE CONTROL MEASURES / PERSONAL PROTECTION**

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**8.1 Components with limit values that require monitoring at the workplace:**

| Hazardous Components     | CAS No.    | PEL (OSHA)<br>mg/M <sup>3</sup> | TLV (ACGIH)<br>mg/M <sup>3</sup> |
|--------------------------|------------|---------------------------------|----------------------------------|
| Silica Sand, crystalline | 14808-60-7 | 0.1                             | 0.025 (resp)                     |
| Portland Cement          | 65997-15-1 | 5 (resp) 15 (total)             | 10 (resp)                        |
| Fly Ash                  | 68131-74-8 | N/A                             | N/A                              |

**8.2 Exposure Controls**

Use ventilation adequate to keep exposures below recommended exposure limits.

**CEMENT & CONCRETE PRODUCTS™****8.3 General protective and hygienic measures**

Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work. Avoid contact with the eyes and skin.

**8.3a Personal protective equipment****Protection of hands:**

Wear gloves of adequate length to offer appropriate skin protection from splashes. Nitrile, Butyl and PVC gloves have been found to offer adequate protection for incidental contact. You cannot rely on pain to alert you to cement burns. Portland cement can cause dermatitis or sensitization.

**Eye protection:**

Wear approved eye protection (properly fitted dust- or splash-proof chemical safety glasses).

**Respiratory protection:**

Wear a NIOSH approved respirator (mask) such as N95 in poorly ventilated areas, when used for extended periods, when use is frequent, or when permissible exposure limits may be exceeded. Respirators should be selected by and used under the direction of a trained health and safety professional, following requirements found in OSHA's respirator standard (29 CFR 1910.134) and ANSI's standard for respiratory protection (Z88.2).

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**SECTION IX - PHYSICAL/CHEMICAL CHARACTERISTICS**

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**General Information****Appearance**

Form: Granular Solid

Color: Gray to gray-brown colored

Odor: None

**pH-value at 20°C (68 °F):**

13 (10%)

**Boiling point/Boiling range:**

Not applicable

**Flash point:**

Not applicable

**Auto igniting:**

Product is not self-igniting

**Vapor pressure at 21°C (70°F)**

Not available

**Density at 25°C (77 °F):**

2.6 to 3.15

**Solubility in / Miscibility with****Water:**

Insoluble

**VOC content:**

0 g/L VOC

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**SECTION X – STABILITY AND REACTIVITY**

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**10.1 Reactivity**

No dangerous reaction known under conditions of normal use.

**10.2 Chemical stability**

Stable under normal storage conditions. Keep in dry storage.

**CEMENT & CONCRETE PRODUCTS™****10.3 Possibility of hazardous reaction**

No dangerous reaction known under conditions of normal use.

**10.4 Thermal decomposition / conditions to be avoided**

No decomposition if used according to specifications.

**10.5 Incompatible materials**

Contact of silica with powerful oxidizing agents such as fluorine, chlorine trifluoride, manganese trioxide, or oxygen difluoride may cause fires

**10.6 Hazardous Decomposition or By-products**

Silica will dissolve in Hydrofluoric Acid and produce a corrosive gas – silicon tetrafluoride.

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**SECTION XI – TOXICOLOGICAL INFORMATION**

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**11.1 Exposure Routes:** Skin contact, skin adsorption, eye contact, inhalation, or ingestion.

**11.2 Symptoms related to physical/chemical/toxicological characteristics:**

**Inhalation:** May cause respiratory tract irritation. Causes damage to organs through prolonged or repeated exposure. This product contains crystalline silica. Prolonged or repeated inhalation of respirable silica from this product can cause silicosis.

**Skin contact:** Causes severe skin burns. Handling can cause dry skin, discomfort, irritation, and dermatitis. May cause sensitization by skin contact. Product becomes extremely alkaline when exposed to moisture, and can cause alkali burns and affect the mucous membranes.

**Eye Contact:** Causes serious eye damage. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva.

**Ingestion:** Harmful if swallowed. Ingestion may cause discomfort and/or distress, nausea or vomiting.

**11.3 Delayed, immediate and chronic effects of short-term and long-term exposure****Short Term**

**Skin Corrosion/Irritation:** Causes severe skin burns.

**Serious Eye Damage/Irritation:** Causes severe eye damage.

**Respiratory Sensitization:** Not available

**Skin Sensitization:** May cause an allergic skin reaction.

**Specific Target Organ Toxicity-Single Exposure:** (Category 3) May cause respiratory irritation.

**Aspiration Hazard:** Not available

**Long Term**

**Carcinogenicity:** May cause cancer through chronic inhalation.

**Germ Cell Mutagenicity:** Not available

**Reproductive Toxicity:** Not available

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Specific Target Organ Toxicity- Repeated Exposure: (Category 1) Causes damage to lungs through prolonged/repeated exposure  
Synergistic/Antagonistic Effects: Not available.

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**SECTION XII – ECOLOGICAL INFORMATION**

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**12.1 Ecotoxicity**

May cause long-term adverse effects to the aquatic environment. Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system. Must not reach bodies of water or drainage ditch undiluted or un-neutralized

**12.2 Persistence and degradability**

No further relevant information available.

**12.3 Bioaccumulative potential:**

No further relevant information available.

**12.4 Mobility in soil**

No further relevant information available.

**12.5 Other Adverse Effects**

No further relevant information available.

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**SECTION XIII – DISPOSAL CONSIDERATIONS**

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**13.1 Waste Disposal Method**

The packaging and material may be land filled; however, material should be covered to minimize generation of airborne dust. This product is not classified as a hazardous waste under the authority of the RCRA (40CFR 261) or CERCLA (40CFR 117&302). Disposal must be made in accordance with local, state and federal regulations.

**13.2 Other disposal considerations****Uncleaned packaging**

**Recommendation:** Disposal must be made in accordance with local, state and federal regulations.

**Recommended cleansing agent:** Water, if necessary with cleansing agents.

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**SECTION XIV – TRANSPORT INFORMATION**

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|                                      | <b>DOT (U.S.)</b> | <b>TDG (Canada)</b> |
|--------------------------------------|-------------------|---------------------|
| <b>UN-Number</b>                     | Not Regulated     | Not Regulated       |
| <b>UN proper shipping name</b>       | Not Regulated     | Not Regulated       |
| <b>Transport Hazard Class(es)</b>    | Not Regulated     | Not Regulated       |
| <b>Packing Group (if applicable)</b> | Not Regulated     | Not Regulated       |

**CEMENT & CONCRETE PRODUCTS™****14.1 Environmental hazards:**

Not Available

**14.2 Transport in bulk according to Annex II of Marpol 73/78 and the IBC Code**

Not available

**14.3 Special precautions for user**

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

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**SECTION XV – OTHER REGULATORY INFORMATION**

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**15.1 Safety, Health and Environmental Regulations/Legislations specific for the chemical****Canada**

**WHMIS Classification:** Considered to be a hazardous material under the Hazardous Products Act as defined by the Hazardous Products Regulations and subject to the requirements of Health Canada's Workplace Hazardous Material Information (WHMIS). This document complies with the WHMIS requirements of the Hazardous Products Act (HPA) and the HPR.

**15.2 US Federal Information****SARA 302/311/312/313 Components**

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302, 311, 312 or 313.

**RCRA:** Crystalline silica (quartz) is not classified as a hazardous waste under the Resource Conservation and Recovery Act, or its regulations, 40 CFR §261 et seq.

**CERCLA:** Crystalline silica (quartz) is not classified as a hazardous substance under regulations of the Comprehensive Environmental Response Compensation and Liability Act (CERCLA), 40 CFR §302.

**Emergency Planning and Community Right to Know Act (SARA Title III):** Crystalline silica (quartz) is not an extremely hazardous substance under Section 302 and is not a toxic chemical subject to the requirements of Section 313.

**FDA:** Silica is included in the list of substances that may be included in coatings used in food contact surfaces, 21 CFR §175.300(b)(3)(xxvi).

**NTP:** Respirable crystalline silica, primarily quartz dusts occurring in industrial and occupational settings, is classified as Known to be a Human Carcinogen.

**OSHA Carcinogen:** Crystalline silica (quartz) is not listed.

**CEMENT & CONCRETE PRODUCTS™****15.3 State Right to Know Laws****California Prop. 65 Components**

**WARNING:** This product can expose you to chemicals including crystalline silica which is known to the State of California to cause cancer and hexavalent chromium compounds which are known to the State of California to cause birth defects or other reproductive harm. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

**California Inhalation Reference Exposure Level (REL):** California established a chronic REL of 3 µg for silica (crystalline, respirable). A chronic REL is an airborne level of a substance at or below which no adverse health effects are anticipated in individuals indefinitely exposed to the substance at that level.

**Massachusetts Toxic Use Reduction Act:** Silica, crystalline (respirable size, <10 microns) is "toxic" for purposes of the Massachusetts Toxic Use Reduction Act.

**15.4 Global Inventories**

**DSL** All components of this product are on the Canadian DSL list.

**TSCA No.:** Crystalline silica (quartz) appears on the EPA TSCA inventory under the CAS No. 14808-60-7. All constituents are listed in the TSCA inventory.

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**SECTION XVI – OTHER INFORMATION**

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**Last Updated: February 7, 2018**

**NOTE:** The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, express or implied, is made with respect to the information contained herein. We accept no responsibility and disclaim all liability for any harmful effects which may be caused by exposure to silica contained in our products.

Prepared by

The QUIKRETE Companies, LLC

**End of SDS**