

## Material Safety Data Sheet Index

### QUIKRETE Finished Products Listing by Product Name

PRODUCT NAME	PRODUCT CODE	MSDS NUMBER
Acrylic Concrete Cure & Seal	8800	MSDS W
Agricultural Limestone	1111	MSDS C
All-Purpose Gravel	1151	MSDS B
All-Purpose Sand	1152	MSDS B
Anchoring Cement	1245-00	MSDS D
Aquablend	1225-60	MSDS F
Aqualight	1225-62	MSDS F
Athletic Field Marker	1954	MSDS C
Base Coat Stucco	1139-80	MSDS E
Basic Concrete Mix	1015-00	MSDS J
BBond MS	1234	MSDS F
Blacktop Patch	1701-50	MSDS HH
Blacktop Patch, Commercial Grade	1701-62	MSDS HH
Blacktop Repair	8630-00	MSDS FF
BlocBond	1225-51	MSDS F
Bulk Masonry Mortars and Stuccos	SR-2000	MSDS E
Caulk and Joint Sealant	8620-14	MSDS FF
Cement Color (Liquid)	1317-00	MSDS LL
Chemically Hydrated Lime	9907	MSDS G
Color-Pak, (all colors but charcoal)	1318-D	MSDS Q
Color-Pak, (Charcoal)	1318-B	MSDS QQ
Commercial Grade Sand, Coarse	1963	MSDS BB
Commercial Grade Sand, Fine	1961	MSDS BB
Commercial Grade Sand, Medium	1962	MSDS BB
Concrete Acrylic Fortifier	8610-00	MSDS H
Concrete Acrylic Fortifier, Concentrated	8611	MSDS H
Concrete and Asphalt Cleaner	8601-01	MSDS Y
Concrete and Stucco Wash	8601-15	MSDS RR
Concrete Bonding Adhesive	9902-00	MSDS CC
Concrete Mix	1101-00	MSDS J
Concrete Repair	8620-00	MSDS FF
Concrete Resurfacer	1131-60	MSDS D
Concrete Resurfacer, Skid resistant	1131-61	MSDS D
Core Fill Grout, Coarse	1585-07	MSDS J
Core Fill Grout, Fine	1585-08	MSDS J
Crack Resistant Concrete	1006-80	MSDS J
Deco Pebbles	9905	MSDS B

<b>PRODUCT NAME</b>	<b>PRODUCT CODE</b>	<b>MSDS NUMBER</b>
Elastomeric Coating	1315-00	MSDS PP
Expansion Joint	6917	MSDS UU
Exterior Stucco	1209	MSDS E
Exterior Use Anchoring Cement	1245-81	MSDS D
Fast Set Underlayment	1248-00	MSDS L
Fast Set Underlayment (Unsanded)	1248-26	MSDS L
Fast Setting Concrete	1004-50	MSDS J
FastSet™ Cement, Commercial Grade	1124-92	MSDS J
FastSet™ Concrete, Commercial Grade	1004-51	MSDS J
FastSet™ Non-Shrink Grout, Commercial Grade	1585-09	MSDS J
FastSet™ Repair Mortar, Commercial Grade	1241-60	MSDS J
Fence Post Mix	1005-00	MSDS J
Fiber Reinforced Concrete	1006-60	MSDS J
Fibercrete	1009-00	MSDS D
Finish Coat Stucco	1202-00	MSDS E
Fly Ash	5009	MSDS JJ
Foam Coating	1219-81	MSDS E
Foundation Coating	1215	MSDS D
FR 200 Fireproof Sealant	1225-59	MSDS Z
FRC 121	1585-06	MSDS DD
Geothermal Well Grout	1590-55	MSDS D
Glass Block Mortar (White)	1610-00	MSDS E
Gray Concrete Crack Seal	8640-00	MSDS X
Grout-Type A	1585-04	MSDS K
Handi-Crete Concrete	1141-00	MSDS J
Handi-crete Sand Mix	1143-00	MSDS J
Heavy Duty Masonry Coating	1312-40	MSDS E
High Yield Concrete	1100	MSDS J
Hydraulic Water Stop	1126-00	MSDS D
Latex Blacktop Crack Seal	8640-05	MSDS X
Light Weight Concrete	1008-50	MSDS J
Liquid Color Concentrate	5839	MSDS LL
Liquid Stucco Colors	1323	MSDS LL
Liquid Stucco, Coarse Sand Finish	1321-00	MSDS AA
Liquid Stucco, Fine Sand Finish	1322	MSDS AA
Liquid Stucco, Swirl Finish	1320	MSDS AA
Marble Chips	9906	MSDS C
Marble Stucco	1802-00	MSDS E
Mason Mix	1136	MSDS E
Mason Sand	1952	MSDS B
Masonry Cement-type N	1125-70	MSDS K

<b>PRODUCT NAME</b>	<b>PRODUCT CODE</b>	<b>MSDS NUMBER</b>
Masonry Cement-type S	1125-71	MSDS K
Masonry Coating	2402-00	MSDS E
Mortar and Stucco Color	1319	MSDS LL
Mortar Mix	1102-00	MSDS E
Mortar Repair	8620-09	MSDS FF
Mudjacking Grout	1585-11	MSDS F
Non-Shrink General Purpose Grout	1585-01	MSDS D
Non-Shrink Precision Grout	1585-00	MSDS D
Omni Grout Sanded	1490-01	MSDS E
One Coat Fiberglass Reinforced Stucco	1200-80	MSDS E
One Coat Fiberglass Reinforced Stucco, Conc.	1216-90	MSDS E
Packsetter Grout	1585-05	MSDS DD
Patching Plaster	9903-00	MSDS L
Patio Paver Limestone Base	1150-49	MSDS C
Patio Paver Sand	1150	MSDS B
Pebble Finish	1806-00	MSDS E
Pelletized Lime	1125-40	MSDS C
Plaster Sand	1113-54	MSDS B
Plastic Cement	2121-94	MSDS K
Play Sand	1113-50	MSDS B
Polymer Modified Sanded Tile Grout	1489-01	MSDS E
Polymer Modified Omni Grout, Unsanded	1491-01	MSDS F
Polymer Modified Unsanded Tile Grout	1492-00	MSDS F
Pool Filter Sand	1153	MSDS B
Pool Finish	1800-00	MSDS E
Pool Plaster	1319-80	MSDS E
Portland Cement	1124-94	MSDS K
Portland/Lime Cement	1125-21	MSDS K
Portland/Pozzolan Cement	1118-35	MSDS K
Quick Setting Cement	1240-00	MSDS D
QUIKRETE 5000 Concrete	1007-00	MSDS J
QUIKWALL Surface Bonding Cement	1231-00	MSDS E
QUIKWALL Surface Bonding Cement Unsanded	1221-00	MSDS F
Rapid Hardening Sand Mix	1243-00	MSDS D
Rapid Road Repair- Fibered	1242-00	MSDS D
Rapid Road Repair- Unfibered	1242-52	MSDS D
Redi-Seal Mine Sealant	1225-61	MSDS Z
Rip Rap	1129-00	MSDS J
Rock Salt	9002	MSDS V
Roof Tile Mortar	1140-80	MSDS E
Sand (Topping) Mix	1103-00	MSDS J

<b>PRODUCT NAME</b>	<b>PRODUCT CODE</b>	<b>MSDS NUMBER</b>
Sanded Tile Grout	1156-01	MSDS E
Self Leveling Floor Resurfacer, Fast Set	1249-51	MSDS D
Self Leveling Floor Resurfacer, Normal Set	1249-50	MSDS D
Shotcrete	1228	MSDS D
Shotcrete MS (Formerly Gun-ite MS)	1229-80	MSDS D
Thermo-Lube	1905-00	MSDS N
Thin-Set Floor Mix	1548-50	MSDS E
Thin-Set Multi-Purpose	1550-25	MSDS E
Thin-Set Sanded	1547-25	MSDS E
Thin-Set Unsanded	1553-25	MSDS F
Thin-Set Wall Mix	1555-50	MSDS E
Traction Sand	1158	MSDS B
Traffic Top Driveway Sealer	8803	MSDS M
Traffic Top Driveway Sealer & Filler	8804-00	MSDS NN
Tube Sand	1159	MSDS B
Unsanded Tile Grout (Dry Grout)	1552-25	MSDS F
Veneer Plaster, Sand White	1801-04	MSDS L
Veneer Plaster, Smooth	1801-00	MSDS L
Vinyl Concrete Patcher, Gray	1133-00	MSDS J
Vinyl Concrete Patcher, White	1132	MSDS J



# Material Safety Data Sheet [OSHA 29 CFR 1910.1200]

The QUIKRETE® Companies  
One Securities Centre  
3490 Piedmont Road, Suite 1300  
Atlanta, GA 30329

Emergency Telephone Number  
(770) 216-9580

Information Telephone Number  
(770) 216-9580

Revision: July 2003

MSDS AA

## SECTION I: PRODUCT IDENTIFICATION

<u>QUIKRETE® Product Name</u>	<u>Code #</u>
QUIKWALL® LIQUID STUCCO	1320, 1321, 1322

## SECTION II - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

Hazardous Components	CAS No.	PEL (OSHA) mg/M <sup>3</sup>	TLV (ACGIH) mg/M <sup>3</sup>
Limestone/Marble	1317-65-3	5	5
Acrylic Polymer	Not Hazardous	None	None
Clay	12174-11-7	15	10
Titanium Dioxide	13463-67-7	15	10
Ethylene Glycol	107-21-1	50 ppm (1)	50 ppm (1)

(1) Limits for Vapor & Mist

## SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

**Solubility in Water:** Dilutable.

**Physical Appearance and Odor:** White or tinted viscous liquid with a slight ether and ammonia odor. May contain granular white fillers.

**Boiling Point:** ~100 C (212 ° F)

**Freezing Point:** ~ -1 C (30 ° F)

## SECTION IV - FIRE AND EXPLOSION HAZARD DATA

**Unusual Hazards:** This water based dispersion can splatter at temperatures above 100 C (212 ° F). Polymer film can burn once the water has evaporated. Product also may contain less than 1 % of a solvent with a Flash Point of 120 C (248 ° F)

**Extinguishing Agents:** Use methods appropriate for surrounding fire.

**Personal Protective Equipment:** For fire fighting, wear self-contained breathing apparatus and full protective gear.

## SECTION V - REACTIVITY DATA

**Stability:** This material is considered stable. However, avoid temperatures above 177C/350F, the onset of polymer decomposition. Thermal decomposition is dependent on time and temperature.

**Hazardous Decomposition Products:** Thermal decomposition may yield acrylic monomers.

**Hazardous Polymerization:** Will not occur.

**Incompatibility:** Avoid contact with strong oxidizing agents or strong alkalis.



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Product: QUIKWALL<sup>®</sup> LIQUID STUCCO

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**SECTION VI - HEALTH HAZARD DATA**

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<b>Route(s) of Entry:</b>	Inhalation?	Yes
	Skin?	Yes
	Ingestion?	Yes

**HEALTH EFFECTS FROM OVEREXPOSURE**

**Inhalation of vapor or mist can cause the following:** headache - nausea - irritation of nose, throat, and lungs

**Eye Contact:** Direct contact with material can cause irritation and possible corneal injury.

**Skin Contact:** Prolonged or repeated skin contact can cause slight irritation.

**FIRST AID:**

**Skin:** Thoroughly wash affected area with soap and water. Remove contaminated clothing.

**Eye Contact:** Flush with large amounts of water, lifting the upper and lower lids occasionally. Do not rub eyes. Product contains granular fillers which can scratch the cornea. Get medical attention.

**Ingestion:** If swallowed, give two glasses of water. If large amounts are ingested, induce vomiting with Ipecac syrup or by placing finger at the back of the throat. Never give anything by mouth to an unconscious person. Get medical attention.

**Inhalation:** Remove to fresh air if effects occur. Consult physician.

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

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AVOID SKIN AND EYE CONTACT AND AVOID BREATHING VAPORS.

**Storage Conditions:** Keep from freezing; material may coagulate. The minimum recommended storage temperature for this material is 1C/34F. The maximum recommended storage temperature for this material is 49C/120F.

Personal Protective Equipment:

**Eye protection:** Use chemical splash goggles (ANSI Z87.1 or approved equivalent)

**Hand protection:** Neoprene gloves are recommended. Gloves of other chemically resistant materials may not provide adequate protection.

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**SECTION VIII - CONTROL MEASURES**

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**Spill and leak handling:**

Keep spectators away. Floor may be slippery; use care to avoid falling. Contain spills immediately with inert materials (e.g. sand, earth). Transfer liquids and solid diking material to separate suitable containers for recovery or disposal.

**CAUTION:** Keep spills and cleaning runoff out of municipal sewers and open bodies of water.

Personal Protection

**Ventilation:**

Use local exhaust ventilation with a minimum capture velocity of 100 ft/min. (30 m/min.) at the point of vapor evolution. Refer to the current edition of Industrial Ventilation: A Manual of Recommended Practice published by the

Product: QUIKWALL® LIQUID STUCCO

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American Conference of Governmental Industrial Hygienists for information on the design, installation, use, and maintenance of exhaust systems.

**Other Protective Equipment:** Facilities storing or utilizing this material should be equipped with an eyewash facility.

#### WASTE DISPOSAL

Coagulate the emulsion by the stepwise addition of ferric chloride and lime. Remove the clear supernatant and flush to a chemical sewer. Incinerate liquid and contaminated solids in accordance with local, state, and federal regulations.

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**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.





# Material Safety Data Sheet [OSHA 29 CFR 1910.1200]

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(770) 216-9580

Information Telephone Number  
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Revision: July 2003

MSDS B

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## SECTION I: PRODUCT IDENTIFICATION

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Product Types: SILICA SANDS AND GRAVEL

<u>QUIKRETE® Product Name</u>	<u>Code #</u>	<u>QUIKRETE® Product Name</u>	<u>Code #</u>
ALL- PURPOSE SAND	1152	ALL PURPOSE GRAVEL	1151
PLAY SAND	1113	POOL FILTER SAND	1153
TUBE SAND	1159	DECO PEBBLES	9905
PATIO PAVER SAND	1150	MASON SAND	1952
TRACTION SAND	1158	PLASTER SAND	1113-54

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## SECTION II - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

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Hazardous Components	CAS No.	PEL (OSHA) mg/M <sup>3</sup>	TLV (ACGIH) mg/M <sup>3</sup>
Silica Sand, crystalline	14808-60-7	$\frac{10}{\%SiO_2+2}$	0.05 (respirable)
Limestone	01317-65-3	5	5

**Other Limits:** National Institute for Occupational Safety and Health (NIOSH). Recommended standard maximum permissible concentration=0.05 mg/M<sup>3</sup> (respirable free silica) as determined by a full-shift sample up to 10-hour working day, 40-hour work week. See NIOSH Criteria for a Recommended Standard Occupational Exposure to Crystalline Silica.

**DO NOT USE FOR SANDBLASTING.**

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## SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

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<b>Appearance:</b>	White or tan sand, granular, crushed, or ground to fine mesh sizes		
<b>Specific Gravity:</b>	2.5 to 2.7	<b>Melting Point:</b>	>3110°F (1710°C) <b>Boiling Point:</b> 4046°F (2230°C)
<b>Vapor Pressure:</b>	None	<b>Vapor Density:</b>	None <b>Evaporation Rate:</b> None
<b>Solubility in Water:</b>	Slight	<b>Odor:</b>	None

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## SECTION IV - FIRE AND EXPLOSION HAZARD DATA

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**Flammability:** Noncombustible and not explosive.

**Extinguishing Media:** None required; Sand may be used as extinguishing media for Class A and B fires.



Product Types: SILICA SANDS AND GRAVEL

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### SECTION V - REACTIVITY DATA

**Stability:** Stable.

**Incompatibility (Materials to Avoid):** Contact with powerful oxidizing agents such as fluorine, chlorine trifluoride, manganese trioxide, oxygen difluoride, may cause fires.

**Hazardous Decomposition or By-products:** Silica will dissolve in Hydrofluoric Acid and produce a corrosive gas - silicon tetrafluoride.

**Hazardous Polymerization:** Will Not Occur.

**Condition to Avoid:** None

### SECTION VI - HEALTH HAZARD DATA

The product contains silica particles that may be broken down to the respirable size range during shipping, handling, or use, and thus may be inhaled.

**Route(s) of Entry:** Inhalation, Skin, Ingestion

**Health Hazards (Acute and Chronic):**

Contains Silica dust that can cause severe and permanent lung damage and other diseases.

Breathing silica dust can cause silicosis, a lung disease that can cause serious breathing difficulties and death.

Breathing Silica dust may cause cancer.

Breathing silica dust may cause scleroderma, a scarring of the skin and internal organs.

Breathing silica dust may not cause noticeable injury or illness, even though permanent lung damage may be occurring.

**Carcinogenicity Listings:**

NTP:	Known carcinogen
OSHA:	Not listed as a carcinogen
IARC Monographs:	Group 1 Carcinogen
California Proposition 65:	Known carcinogen

**NTP:** The National Toxicology Program, in its “Ninth Report on Carcinogens” (released May 15, 2000) concluded that “Respirable crystalline silica (RCS), primarily quartz dusts occurring in industrial and occupational settings, is *known to be a human carcinogen*, based on sufficient evidence of carcinogenicity from studies in humans indicating a causal relationship between exposure to RCS and increased lung cancer rates in workers exposed to crystalline silica dust (reviewed in IAC, 1997; Brown *et al.*, 1997; Hind *et al.*, 1997)

**IARC:** The International Agency for Research on Cancer (“IARC”) concluded that there was “*sufficient evidence* in humans for the carcinogenicity of crystalline silica in the forms of quartz or cristobalite from occupational sources”, and that there is “*sufficient evidence* in experimental animals for the carcinogenicity of quartz or cristobalite.” The overall IARC evaluation was that “crystalline silica inhaled in the form of quartz or cristobalite from occupational sources is *carcinogenic to humans* (Group 1).” The IARC evaluation noted that “carcinogenicity was not detected in all industrial circumstances or studies. Carcinogenicity may be dependent on inherent characteristics of the crystalline silica or on external factors affecting its biological activity or distribution of its polymorphs.” For further information on the IARC evaluation, see IARC Monographs on the Evaluation of carcinogenic Risks to Humans, Volume 68, “Silica, Some Silicates...” (1997)

**Signs and symptoms of Exposure:** Undue breathlessness, wheezing, cough, and sputum production.

**Medical Conditions Generally Aggravated by Exposure:** Pulmonary function may be reduced by inhalation of respirable crystalline silica. Also lung scarring produced by such inhalation may lead to a progressive massive fibrosis of the lung (silicosis) which may aggravate other pulmonary conditions and diseases and which increases susceptibility to pulmonary failure. Smoking aggravates the effect of exposure. Exposure to crystalline silica or the disease silicosis is associated with increased incidence of scleroderma, Tuberculosis and possibly increased incidence of kidney lesions.

Product Types: SILICA SANDS AND GRAVEL

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**Emergency and First Aid Procedures:** For sand in eyes, wash immediately with water. If irritation persists, seek medical attention. For gross inhalation, remove person immediately to fresh air, give artificial respiration as needed, and seek medical attention as needed.

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## SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE

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**Spills:** If spilled, use dustless methods (vacuum) and place into covered container for disposal or flush with water. Do not dry sweep. Wear protective equipment specified below.

**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 RCRA or CERCLA.

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## SECTION VIII - CONTROL MEASURES/PERSONAL PROTECTION

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**Inhalation:** DO NOT BREATHE DUST. In cases where the sand can be used in a damp condition, the most effective dust control measure is to keep the sand damp. Many uses of silica sand require it to be used in a dry condition; in such cases PEL exposure limits may be exceeded. Local exhaust can be helpful to reduce airborne dust levels. When dust levels exceed PEL exposure limits, the use of an OSHA, MSHA or NIOSH approved respirator is required. Respirator requirements are based on exposure level as shown below:

5 x PEL or less: Any dust respirator

10 x PEL or less: Any dust respirator, except single-use or quarter-mask respirator. Any fume respirator or high efficiency particulate filter respirator.

50 x PEL or less: A high efficiency particulate filter respirator with a full face-piece.

500 x PEL or less: A powered air-purifying respirator with a high efficiency particulate filter. A Type C supplied-air respirator operated in pressure-demand or other positive pressure or continuous-flow mode.

Greater than 500 x PEL or entry and escape from unknown concentrations: Self-contained breathing apparatus with a full face-piece operated pressure-demand or other positive pressure mode. A combination respirator which includes a Type C supplied-air respirator with a full face-piece operated in pressure-demand or other positive pressure continuous-flow mode and an auxiliary self-contained breathing apparatus operated in pressure demand or other positive pressure mode.

**Eyes:** Wear tight fitting goggles

WARN EMPLOYEES AND/OR CUSTOMERS OF THE HAZARDS AND REQUIRED OSHA PRECAUTIONS ASSOCIATED WITH THE USE OF THIS PRODUCT.

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**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. Customers-users must comply with all applicable health and safety laws, regulations and orders covering silica.



# Material Safety Data Sheet [OSHA 29 CFR 1910.1200]

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MSDS BB

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## SECTION I: PRODUCT IDENTIFICATION

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Product Types: SILICA SANDS AND GRAVEL

**QUIKRETE® Product Name**  
COMMERCIAL GRADE SAND

**Code #**  
1961, 1962, 1963

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## SECTION II - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

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Hazardous Components	CAS No.	PEL (OSHA) mg/M <sup>3</sup>	TLV (ACGIH) mg/M <sup>3</sup>
Silica Sand, crystalline	14808-60-7	$\frac{10}{\%SiO_2+2}$	0.05(respirable crystalline quartz)

**Other Limits:** National Institute for Occupational Safety and Health (NIOSH). Recommended standard maximum permissible concentration=0.05 mg/M<sup>3</sup> (respirable free silica) as determined by a full-shift sample up to 10-hour working day, 40-hour work week. See NIOSH Criteria for a Recommended Standard Occupational Exposure to Crystalline Silica.

**DO NOT USE FOR SANDBLASTING.**

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## SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

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**Appearance:** White or tan sand, granular, crushed, or ground to fine mesh sizes

**Specific Gravity:** 2.5 to 2.7 **Melting Point:** 3110 °F (1710° C) **Boiling Point:** 4046 °F (2230 °C)

**Vapor Pressure:** None **Vapor Density:** None **Evaporation Rate:** None

**Solubility in Water:** Slight **Odor:** None

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## SECTION VI - HEALTH HAZARD DATA

---

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Product Types: SILICA SANDS

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## SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE

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**Spills:** If spilled, use dustless methods (vacuum) and place into covered container for disposal or flush with water. Do not dry sweep. Wear protective equipment specified below.

Product Types: SILICA SANDS

MSDS BB

**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 RCRA or CERCLA.

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**SECTION VIII - CONTROL MEASURES/PERSONAL PROTECTION**

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5 x PEL or less: Any dust respirator

10 x PEL or less: Any dust respirator, except single-use or quarter-mask respirator. Any fume respirator or high efficiency particulate filter respirator.

50 x PEL or less: A high efficiency particulate filter respirator with a full face-piece.

500 x PEL or less: A powered air-purifying respirator with a high efficiency particulate filter. A Type C supplied-air respirator operated in pressure-demand or other positive pressure or continuous-flow mode.

Greater than 500 x PEL or entry and escape from unknown concentrations: Self-contained breathing apparatus with a full face-piece operated pressure-demand or other positive pressure mode. A combination respirator which includes a Type C supplied-air respirator with a full face-piece operated in pressure-demand or other positive pressure continuous-flow mode and an auxiliary self-contained breathing apparatus operated in pressure demand or other positive pressure mode.

**Eyes:** Wear tight fitting goggles

**WARN EMPLOYEES AND/OR CUSTOMERS OF THE HAZARDS AND REQUIRED OSHA PRECAUTIONS ASSOCIATED WITH THE USE OF THIS PRODUCT.**

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# Material Safety Data Sheet [OSHA 29 CFR 1910.1200]

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Emergency Telephone Number  
(770) 216-9580

Information Telephone Number  
(770) 216-9580

Revision: July 2003

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## SECTION I: PRODUCT IDENTIFICATION

Product Types: LIMESTONE AGGREGATES

<u>QUIKRETE® Product Name</u>	<u>Code #</u>	<u>QUIKRETE® Product Name</u>	<u>Code #</u>
AGRICULTURAL LIMESTONE	1111	MARBLE CHIPS	9906
PATIO PAVER LIMESTONE BASE	1150-49	ATHLETIC FIELD MARKER	1954
PELLETIZED LIME	1125-40		

## SECTION II - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

Hazardous Components	CAS No.	PEL (OSHA) mg/M <sup>3</sup>	TLV (ACGIH) mg/M <sup>3</sup>
Limestone (Calcium Carbonate)	1317-65-3	5	5
Silica Sand, crystalline (1)	14808-60-7	<u>10</u> %SiO <sub>2</sub> +2	0.05 (respirable)

**Other Limits:** National Institute for Occupational Safety and Health (NIOSH). Recommended standard maximum permissible concentration=0.05 mg/M<sup>3</sup> (respirable free silica) as determined by a full-shift sample up to 10-hour working day, 40-hour work week. See NIOSH Criteria for a Recommended Standard Occupational Exposure to Crystalline Silica.

(1) Low levels of crystalline Silica (0.01-1.5 %) may be found in this product either naturally occurring in the limestone materials or due to low levels of contamination which occurs in the manufacturing process.

## SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

**Appearance :** White to off white crushed, ground or powdered solid

**Specific Gravity:** ~2.7    **Melting Point:** NA    **Boiling Point:** Decomposes to CaO

**Vapor Pressure:** None    **Vapor Density:** None    **Evaporation Rate:** None

**Solubility in Water:** Slight    **Odor:** None

## SECTION IV - FIRE AND EXPLOSION HAZARD DATA

**Flammability:** Noncombustible and not explosive.

**Extinguishing Media:** None required.



PRODUCT TYPES: LIMESTONE AGGREGATES

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**SECTION V - REACTIVITY DATA**

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**Stability:** Stable.**Incompatibility (Materials to Avoid):** Reacts with strong acids to liberate carbon dioxide**Hazardous Decomposition or By-products:** None**Hazardous Polymerization:** Will Not Occur.

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**SECTION VI - HEALTH HAZARD DATA**

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The product contains silica particles that may be broken down to the respirable size range during shipping, handling, or use, and thus may be inhaled.

**Route(s) of Entry:** Inhalation

**Health Hazards (Acute and Chronic):** Respirable crystalline silica (quartz) can cause silicosis, a fibrosis (scarring) of the lungs and possibly cancer. There is evidence that exposure to respirable silica or the disease silicosis is associated with an increased incidence of Scleroderma, tuberculosis and kidney disorders.

**Carcinogenicity listings:** Crystalline silica, a trace component in the product is listed as follows:

NTP:	Known carcinogen
OSHA:	Not listed as a carcinogen
IARC Monographs:	Group 1 Carcinogen
California Proposition 65:	Known carcinogen

**NTP:** The National Toxicology Program, in its “Ninth Report on Carcinogens” (released May 15, 2000) concluded that “Respirable crystalline silica (RCS), primarily quartz dusts occurring in industrial and occupational settings, is *known to be a human carcinogen*, based on sufficient evidence of carcinogenicity from studies in humans indicating a causal relationship between exposure to RCS and increased lung cancer rates in workers exposed to crystalline silica dust (reviewed in IAC, 1997; Brown *et al.*, 1997; Hind *et al.*, 1997)

**IARC:** The International Agency for Research on Cancer (“IARC”) concluded that there was “*sufficient evidence* in humans for the carcinogenicity of crystalline silica in the forms of quartz or cristobalite from occupational sources”, and that there is “*sufficient evidence* in experimental animals for the carcinogenicity of quartz or cristobalite.” The overall IARC evaluation was that “crystalline silica inhaled in the form of quartz or cristobalite from occupational sources is *carcinogenic to humans* (Group 1).” The IARC evaluation noted that “carcinogenicity was not detected in all industrial circumstances or studies. Carcinogenicity may be dependent on inherent characteristics of the crystalline silica or on external factors affecting its biological activity or distribution of its polymorphs.” For further information on the IARC evaluation, see IARC Monographs on the Evaluation of carcinogenic Risks to Humans, Volume 68, “Silica, Some Silicates...” (1997)

**Signs and symptoms of Exposure:** Undue breathlessness, wheezing, cough, and sputum production.

**Medical Conditions Generally Aggravated by Exposure:** Pulmonary function may be reduced by inhalation of respirable crystalline silica. Also lung scarring produced by such inhalation may lead to a progressive massive fibrosis of the lung (silicosis) which may aggravate other pulmonary conditions and diseases and which increases susceptibility to pulmonary failure. Exposure to crystalline silica or the disease silicosis is associated with increased incidence of



PRODUCT TYPES: LIMESTONE AGGREGATES

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scleroderma, Tuberculosis and possibly increased incidence of kidney lesions. Smoking aggravates the effect of exposure.

**Emergency and First Aid Procedures:** Eye Contact: Wash immediately with water. If irritation persists, seek medical attention. For gross inhalation, remove person immediately to fresh air, give artificial respiration as needed, seek medical attention as needed.

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### SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE

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**Spills:** Use dustless methods (vacuum) and place into covered container for disposal or flush with water. Do not dry sweep. Wear protective equipment specified below.

**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 RCRA or CERCLA.

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### SECTION VIII - CONTROL MEASURES/PERSONAL PROTECTION

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**Inhalation:** DO NOT BREATHE DUST. In dusty environments, the use of an OSHA, MSHA or NIOSH approved respirator is recommended. Local exhaust can be used, if necessary, to control airborne dust levels.

**Eyes:** Wear tight fitting goggles

WARN EMPLOYEES AND/OR CUSTOMERS OF THE HAZARDS AND REQUIRED OSHA PRECAUTIONS ASSOCIATED WITH THE USE OF THIS PRODUCT.

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**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. Customers-users must comply with all applicable health and safety laws, regulations and orders covering silica.



# Material Safety Data Sheet [OSHA 29 CFR 1910.1200]

The QUIKRETE® Companies  
One Securities Centre  
3490 Piedmont Road, Suite 1300  
Atlanta, GA 30329

Emergency Telephone Number  
(770) 216-9580

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(770) 216-9580

Revision: July 2003

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## SECTION I: PRODUCT IDENTIFICATION

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<b>QUIKRETE® Product Name</b>	<b>Code #</b>
CONCRETE BONDING ADHESIVE	9902

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## SECTION II - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

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Hazardous Components	CAS No.	PEL (OSHA) Mg/m <sup>3</sup>	TLV (ACGIH) mg/m <sup>3</sup>
Vinyl Acetate Ethylene Co-polymer	Not Hazardous		
Vinyl Alcohol Polymer	Not Hazardous		

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## SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

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<b>Appearance:</b> Milky white liquid	<b>Specific Gravity:</b> 1.0 to 1.2
<b>Melting Point:</b> 32°F ( 0°C)	<b>Boiling Point:</b> 212°F ( 100°C)
<b>Vapor Pressure:</b> 17 mm Hg @ 68°F (20°C)	<b>Vapor Density:</b> <1(water)
<b>Evaporation Rate:</b> <1(water)	<b>Odor:</b> vinyl acetate odor

**Solubility in Water:** Water miscible. Dilution with water generally will lower dispersion stability.

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## SECTION IV - FIRE AND EXPLOSION HAZARD DATA

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**Extinguishing Media:** Use extinguishing media appropriate for surrounding fire.

**Special Fire Fighting Procedure:** When polymer burns, water, carbon dioxide, carbon monoxide and smoke are produced. Pyrolysis products may include such materials as acetic acid, acrolein or acetaldehyde. Masks to remove smoke and organic vapor from respirable air are recommended for use when fighting fires involving vinyl acetate polymers and copolymers. There are no unusual fire or explosion hazards.

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## SECTION V - REACTIVITY DATA

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Products are stable in most environments. Coagulation may occur following freezing, thawing or boiling. Products will react violently with any water sensitive material such as sulfuric acid or alkali materials such as sodium or metal hydrides.

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## SECTION VI - HEALTH HAZARD DATA

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**Route(s) of Entry:** Inhalation, Skin, Ingestion



## CONCRETE BONDING ADHESIVE

MSDS CC

**Health Hazards (Acute and Chronic):**

Eye Contact: Direct contact with material can cause slight irritation.

Skin Contact: Prolonged or repeated skin contact can cause slight irritation.

**First Aid:**

Eye Contact: If splashed in the eye, flush with large quantities of water for at least 15 min. Consult a physician if irritation persists.

Skin Contact: Wash the skin with soap and water. Consult a physician if irritation persists.

Ingestion: Ingested amounts are not anticipated to produce adverse health effects, but should be removed from the stomach by inducing vomiting or aspiration. Call a physician.

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

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Rubber protective gloves are recommended. Use safety goggles when splash potential exists.

If material is released or spilled, dam up to limit spreading. Mop up or absorb on inert material and place in containers. If spill occurs in enclosed area, ventilate.

**Note:** Spilled emulsion is very slippery. Use care to avoid falls. Latex will leave a film on drying. Remove saturated clothing and wash contacted skin areas with soap and water.

**Disposal procedure:** Coagulate the emulsion by stepwise addition of ferric chloride and lime. Remove clear supernatant and flush to a chemical sewer. Incinerate liquid and contaminated solids in accordance with local state, and federal regulations.

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**SECTION VIII - CONTROL MEASURES**

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Normal cleanliness should be observed. Store in a cold place, avoid freezing, minimize contact with air to prevent inoculation with microorganisms which can cause decomposition and moldy overgrowth.

If headspace ventilation is required, use humidified air to reduce skin formation on the emulsion surface.

Regulatory Concerns: The products are not restricted articles according to Department of Transportation and Internal Air Transport regulations.

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# Material Safety Data Sheet [OSHA 29 CFR 1910.1200]

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## SECTION I: PRODUCT IDENTIFICATION

PRODUCT TYPES: QUIKRETE® DRY PACKAGED PORTLAND CEMENT BASED PRODUCTS (SERIES 2)

<u>QUIKRETE® Product Name</u>	<u>Code #</u>	<u>QUIKRETE® Product Name</u>	<u>Code #</u>
SHOTCRETE (FORMERLY GUN-ITE)	1228	SHOTCRETE MS (FORMERLY GUN-ITE MS)	1229
NON-SHRINK PRECISION GROUT	1585	NON-SHRINK GENERAL PURPOSE GROUT	1585-01
ANCHORING CEMENT	1245	QUIKWALL® FOUNDATION COATING	1215
RAPID HARDENING SAND MIX	1243-50	RAPID ROAD REPAIR, FIBERED	1242-80
HYDRAULIC WATER STOP	1126	RAPID ROAD REPAIR, UNFIBERED	1242-52
QUICK SETTING CEMENT	1240	SELF LEVELING FLOOR RESURFACER, NORMAL SET, FAST SET	1249-50, 51
CONCRETE RESURFACER	1131-60	EXTERIOR USE ANCHORING CEMENT	1245-80
CONCRETE RESURFACER, SKID RESISTANT	1131-61	GEOTHERMAL WELL GROUT	1590-55
FIBERCRETE	1009-00		

(ALSO APPLIES TO CUSTOM BLENDED SHOTCRETE MIXES)

## SECTION II - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

Hazardous Components	CAS No.	PEL (OSHA) mg/M <sup>3</sup>	TLV (ACGIH) mg/M <sup>3</sup>
Silica Sand, crystalline	14808-60-7	<u>10</u> %SiO <sub>2+2</sub>	0.05 (respirable)
Portland Cement	65997-15-1	5	5
May Contain one or more of the following ingredients:			
Amorphous Silica	07631-86-9	<u>80 mg/M<sup>3</sup></u> % SiO <sub>2</sub>	10
Calcium Sulfate	10101-41-4 or 13397-24-5	5	5
Lime	01305-62-0	5	5
Fly Ash	68131-74-8	5	5
Calcium Aluminate Cement	65997-16-2	5	5
Clay	01332-58-7	5	5
Pulverized Limestone	01317-65-3	5	5

**Other Limits:** National Institute for Occupational Safety and Health (NIOSH). Recommended standard maximum permissible concentration=0.05 mg/M<sup>3</sup> (respirable free silica) as determined by a full-shift sample up to 10-hour working day, 40-hour work week. See NIOSH Criteria for a Recommended Standard Occupational Exposure to Crystalline Silica.



**SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS**

**Appearance:** Gray to gray-brown colored powder. Some products contain coarse aggregate.  
**Specific Gravity:** 2.6 to 3.15      **Melting Point:** >2700<sup>0</sup>F      **Boiling Point:** >2700<sup>0</sup>F  
**Vapor Pressure:** None      **Vapor Density:** None      **Evaporation Rate:** None  
**Solubility in Water:** Slight      **Odor:** None

**SECTION IV - FIRE AND EXPLOSION HAZARD DATA**

**Flammability:** Noncombustible and not explosive.

**SECTION V - REACTIVITY DATA**

**Stability:** Stable.

**Incompatibility (Materials to Avoid):** Contact of silica with powerful oxidizing agents such as fluorine, chlorine trifluoride, manganese trioxide, oxygen difluoride, may cause fires.

**Hazardous Decomposition or By-products:** Silica will dissolve in Hydrofluoric Acid and produce a corrosive gas - silicon tetrafluoride.

**Hazardous Polymerization:** Will Not Occur.

**Condition to Avoid:** Keep dry until used to preserve product utility.

**SECTION VI - HEALTH HAZARD DATA**

**Route(s) of Entry:** Inhalation, Skin, Ingestion

**Acute Exposure:** Product becomes alkaline when exposed to moisture. Exposure can dry the skin, cause alkali burns and effect the mucous membranes. Dust can irritate the eyes and upper respiratory system. Toxic effects noted in animals include, for acute exposures, alveolar damage with pulmonary edema.

**Chronic Exposure:** Dust can cause inflammation of the lining tissue of the interior of the nose and inflammation of the cornea. Hypersensitive individuals may develop an allergic dermatitis. Respirable crystalline silica (quartz) can cause silicosis, a fibrosis (scarring) of the lungs and possibly cancer. There is evidence that exposure to respirable silica or the disease silicosis is associated with an increased incidence of Scleroderma, tuberculosis and kidney disorders.

<b>Carcinogenicity Listings:</b>	NTP:	Known carcinogen
	OSHA:	Not listed as a carcinogen
	IARC Monographs:	Group 1 Carcinogen
	California Proposition 65:	Known carcinogen

NTP: The National Toxicology Program, in its "Ninth Report on Carcinogens" (released May 15, 2000) concluded that "Respirable crystalline silica (RCS), primarily quartz dusts occurring in industrial and occupational settings, is *known to be a human carcinogen*, based on sufficient evidence of carcinogenicity from studies in humans indicating a causal relationship between exposure to RCS and increased lung cancer rates in workers exposed to crystalline silica dust (reviewed in IAC, 1997; Brown *et al.*, 1997; Hind *et al.*, 1997)

Product Types: QUIKRETE® DRY PACKAGED PORTLAND CEMENT BASED PRODUCTS (SERIES 2) MSDS D

**IARC:** The International Agency for Research on Cancer (“IARC”) concluded that there was “*sufficient evidence* in humans for the carcinogenicity of crystalline silica in the forms of quartz or cristobalite from occupational sources”, and that there is “*sufficient evidence* in experimental animals for the carcinogenicity of quartz or cristobalite.” The overall IARC evaluation was that “crystalline silica inhaled in the form of quartz or cristobalite from occupational sources is *carcinogenic to humans* (Group 1).” The IARC evaluation noted that “carcinogenicity was not detected in all industrial circumstances or studies. Carcinogenicity may be dependent on inherent characteristics of the crystalline silica or on external factors affecting its biological activity or distribution of its polymorphs.” For further information on the IARC evaluation, see IARC Monographs on the Evaluation of carcinogenic Risks to Humans, Volume 68, “Silica, Some Silicates...” (1997)

**Signs and Symptoms of Exposure:** Symptoms of excessive exposure to the dust include shortness of breath and reduced pulmonary function. Excessive exposure to skin and eyes especially when mixed with water can cause caustic burns as severe as third degree.

**Medical Conditions Generally Aggravated by Exposure:** Individuals with sensitive skin and with pulmonary and/or respiratory disease, including, but not limited to, asthma and bronchitis, or subject to eye irritation, should be precluded from exposure. Exposure to crystalline silica or the disease silicosis is associated with increased incidence of scleroderma, Tuberculosis and possibly increased incidence of kidney lesions.

**Emergency First Aid Procedures:**

**Eyes:** Immediately flush eye thoroughly with water. Continue flushing eye for at least 15 minutes, including under lids, to remove all particles. Call physician immediately.

**Skin:** Wash skin with cool water and pH-neutral soap or a mild detergent. Seek medical treatment if irritation or inflammation develops or persists. Seek immediate medical treatment in the event of burns.

**Inhalation:** Remove person to fresh air. If breathing is difficult, administer oxygen. If not breathing, give artificial respiration. Seek medical help if coughing and other symptoms do not subside. Inhalation of large amounts of portland cement require immediate medical attention.

**Ingestion:** Do not induce vomiting. If conscious, have the victim drink plenty of water and call a physician immediately.

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## SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE

---

**Spills:** If spilled, use dustless methods (vacuum) and place into covered container for disposal or use if not contaminated or wet. Use adequate ventilation.

**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 RCRA or CERCLA.

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## SECTION VIII - CONTROL MEASURES/PERSONAL PROTECTION

---

**Inhalation:** DO NOT BREATHE DUST. In dusty environments, the use of an OSHA, MSHA or NIOSH approved respirator is recommended. Local exhaust can be used, if necessary, to control airborne dust levels.

**Eyes:** Wear tight fitting goggles.

**Skin:** The use of barrier creams or impervious gloves, boots and clothing to protect the skin from contact is recommended. Following work, workers should shower with soap and water. Precautions must be observed because burns occur with little warning -- little heat is sensed.

WARN EMPLOYEES AND/OR CUSTOMERS OF THE HAZARDS AND REQUIRED OSHA PRECAUTIONS ASSOCIATED WITH THE USE OF THIS PRODUCT.

---

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# Material Safety Data Sheet [OSHA 29 CFR 1910.1200]

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One Securities Centre  
3490 Piedmont Road, Suite 1300  
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Emergency Telephone Number  
(770) 216-9580

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Revision: July 2003

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## SECTION I: PRODUCT IDENTIFICATION

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Product Types: QUIKRETE® SPECIALTY PRODUCTS

<u>QUIKRETE® Product Name</u>	<u>Code #</u>
PACKSETTER GROUT (1)	1585-05
FRC 121	1585-06

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## SECTION II - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

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Hazardous Components	CAS No.	PEL (OSHA) mg/M <sup>3</sup>	TLV (ACGIH) mg/M <sup>3</sup>
Silica Sand, crystalline	14808-60-7	<u>10</u> %SiO <sub>2</sub> +2	0.05 (respirable)
Portland Cement	65997-15-1	5	5
Calcium Aluminate Cement	65997-16-2	5	5
Lithium Carbonate	554-13-2	NA	NA

May Contain one or more of the following ingredients:

Gypsum	10101-41-4 or 13397-24-5	5	5
Clay	01332-58-7	5	5
Pulverized Limestone	01317-65-3	5	5

NA= Not Available

**Other Limits:** National Institute for Occupational Safety and Health (NIOSH). Recommended standard maximum permissible concentration=0.05 mg/M<sup>3</sup> (respirable free silica) as determined by a full-shift sample up to 10-hour working day, 40-hour work week. See NIOSH Criteria for a Recommended Standard for a Recommended Standard Occupational Exposure to Crystalline Silica.

(1) Although this product contains no intentionally added silica, it may contain silica occurring as a natural impurity in other raw materials or from low levels of contamination occurring during the manufacturing procedures.

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## SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

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<b>Appearance:</b>	Gray to gray-brown colored powder. Some products contain coarse aggregate.		
<b>Specific Gravity:</b>	2.6 to 3.15	<b>Melting Point:</b>	>2700 <sup>0</sup> F
<b>Vapor Pressure:</b>	None	<b>Vapor Density:</b>	None
<b>Solubility in Water:</b>	Slight	<b>Boiling Point:</b>	>2700 <sup>0</sup> F
		<b>Evaporation Rate:</b>	None



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**SECTION IV - FIRE AND EXPLOSION HAZARD DATA**


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**Flammability:** Noncombustible and not explosive.

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**SECTION V - REACTIVITY DATA**


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**Stability:** Stable.

**Incompatibility (Materials to Avoid):** Contact of silica with powerful oxidizing agents such as fluorine, chlorine trifluoride, manganese trioxide, oxygen difluoride, may cause fires.

**Hazardous Decomposition or By-products:** Silica will dissolve in Hydrofluoric Acid and produce a corrosive gas - silicon tetrafluoride.

**Hazardous Polymerization:** Will Not Occur.

**Condition to Avoid:** Keep dry until used to preserve product utility.

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**SECTION VI - HEALTH HAZARD DATA**


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**Route(s) of Entry:** Inhalation, Skin, Ingestion

**Acute Exposure:** Product becomes alkaline when exposed to moisture. Exposure can dry the skin, cause alkali burns and effect the mucous membranes. Dust can irritate the eyes and upper respiratory system. Toxic effects noted in animals include, for acute exposures, alveolar damage with pulmonary edema.

**Chronic Exposure:** Dust can cause inflammation of the lining tissue of the interior of the nose and inflammation of the cornea. Hypersensitive individuals may develop an allergic dermatitis. Respirable crystalline silica (quartz) can cause silicosis, a fibrosis (scarring) of the lungs and possibly cancer. There is evidence that exposure to respirable silica or the disease silicosis is associated with an increased incidence of Scleroderma, tuberculosis and kidney disorders.

<b>Carcinogenicity Listings:</b>	NTP:	Known carcinogen
	OSHA:	Not listed as a carcinogen
	IARC Monographs:	Group 1 Carcinogen
	California Proposition 65:	Known carcinogen

**NTP:** The National Toxicology Program, in its "Ninth Report on Carcinogens" (released May 15, 2000) concluded that "Respirable crystalline silica (RCS), primarily quartz dusts occurring in industrial and occupational settings, is *known to be a human carcinogen*, based on sufficient evidence of carcinogenicity from studies in humans indicating a causal relationship between exposure to RCS and increased lung cancer rates in workers exposed to crystalline silica dust (reviewed in IAC, 1997; Brown *et al.*, 1997; Hind *et al.*, 1997)

**IARC:** The International Agency for Research on Cancer ("IARC") concluded that there was "*sufficient evidence* in humans for the carcinogenicity of crystalline silica in the forms of quartz or cristobalite from occupational sources", and that there is "*sufficient evidence* in experimental animals for the carcinogenicity of quartz or cristobalite." The overall IARC evaluation was that "crystalline silica inhaled in the form of quartz or cristobalite from occupational sources is *carcinogenic to humans* (Group 1)." The IARC evaluation noted that "carcinogenicity was not detected in all industrial circumstances or studies. Carcinogenicity may be dependent on inherent characteristics of the crystalline silica or on external factors affecting its biological activity or distribution of its polymorphs." For further information on the IARC evaluation, see IARC Monographs on the Evaluation of carcinogenic Risks to Humans, Volume 68, "Silica, Some Silicates..." (1997)

**Possibility of birth defects:**

This product contains a small amount of Lithium Carbonate. Some studies of pregnant mice and rats were associated with birth defects but only at dose levels large enough to produce severe material toxicity. Although data from the 1970s and early 1980s suggested an increase in cardiovascular defects in babies born to women on lithium carbonate therapy, recent studies have not found any association between lithium exposure and birth defects.

**California Proposition 65:**



**WARNING:** This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

**Signs and Symptoms of Exposure:** Symptoms of excessive exposure to the dust include shortness of breath and reduced pulmonary function. Excessive exposure to skin and eyes especially when mixed with water can cause caustic burns as severe as third degree.

**Medical Conditions Generally Aggravated by Exposure:** Individuals with sensitive skin and with pulmonary and/or respiratory disease, including, but not limited to, asthma and bronchitis, or subject to eye irritation, should be precluded from exposure. Exposure to crystalline silica or the disease silicosis is associated with increased incidence of scleroderma, Tuberculosis and possibly increased incidence of kidney lesions.

**Emergency First Aid Procedures:**

**Eyes:** Immediately flush eye thoroughly with water. Continue flushing eye for at least 15 minutes, including under lids, to remove all particles. Call physician immediately.

**Skin:** Wash skin with cool water and pH-neutral soap or a mild detergent. Seek medical treatment if irritation or inflammation develops or persists. Seek immediate medical treatment in the event of burns.

**Inhalation:** Remove person to fresh air. If breathing is difficult, administer oxygen. If not breathing, give artificial respiration. Seek medical help if coughing and other symptoms do not subside. Inhalation of large amounts of portland cement require immediate medical attention.

**Ingestion:** Do not induce vomiting. If conscious, have the victim drink plenty of water and call a physician immediately.

---

## SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE

---

**Spills:** If spilled, use dustless methods (vacuum) and place into closable container for disposal or use if not contaminated or wet. Use adequate ventilation.

**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 RCRA or CERCLA.

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## SECTION VIII - CONTROL MEASURES/PERSONAL PROTECTION

---

**Inhalation:** DO NOT BREATHE DUST. In dusty environments, the use of an OSHA, MSHA or NIOSH approved respirator is recommended. Local exhaust can be used, if necessary, to control airborne dust levels.

**Eyes:** Wear tight fitting goggles.

**Skin:** The use of barrier creams or impervious gloves, boots and clothing to protect the skin from contact is recommended. Following work, workers should shower with soap and water. Precautions must be observed because burns occur with little warning -- little heat is sensed.

WARN EMPLOYEES AND/OR CUSTOMERS OF THE HAZARDS AND REQUIRED OSHA PRECAUTIONS ASSOCIATED WITH THE USE OF THIS PRODUCT.

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Emergency Telephone Number  
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Revision: July 2003

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## SECTION I: PRODUCT IDENTIFICATION

Product Types: QUIKRETE® DRY PACKAGED PORTLAND CEMENT BASED PRODUCTS (SERIES 4)

<u>QUIKRETE® Product Name</u>	<u>Code #</u>	<u>QUIKRETE® Product Name</u>	<u>Code #</u>
MORTAR MIX	1102	MASON MIX	1136
BASE COAT STUCCO	1139	EXTERIOR STUCCO	1209
FINISH COAT STUCCO	1201	FOAM COATING	1219
MASONRY COATING	2400	MARBLE STUCCO	1802
QUIKWALL® SURFACE BONDING CEMENT	1230	HEAVY DUTY MASONRY COATING	1300
POOL PLASTER	1319	GLASS BLOCK MORTAR	1610
ROOF TILE MORTAR	1140	POOL FINISH	1800
POLYMER MODIFIED SANDED TILE GROUT	1489	SANDED TILE GROUT	1156
THIN-SET FLOOR MIX	1548	THIN-SET WALL MIX	1554
OMNI GROUT SANDED	1490	THIN-SET MULTI-PURPOSE	1550
PEBBLE FINISH	1806	THIN-SET SANDED	1547
BULK MASONRY MORTARS	1162	INCA 1000 MINE SEALANT	1225-50
ONE COAT FIBER REINFORCED STUCCO CONCENTRATED			1216-93
QUIKRETE® ONE COAT FIBERGLASS REINFORCED STUCCO			1200
QUIKRETE® ONE COAT FIBERGLASS REINFORCED STUCCO, CONCENTRATED			1216

(ALSO APPLIES TO SPECIALTY AND/OR CUSTOM DESIGNED MORTARS & STUCCOS)

## SECTION II - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

Hazardous Components	CAS No.	PEL (OSHA) mg/M <sup>3</sup>	TLV (ACGIH) mg/M <sup>3</sup>
Silica Sand, crystalline	14808-60-7	$\frac{10}{\% \text{SiO}_2+2}$	0.05 (respirable)
Portland Cement	65997-15-1	5	5
May Contain one or more of the following ingredients:			
Pulverized Limestone	01317-65-3	5	5
Iron Oxide Pigments	01309-37-1	5	5
Lime	01305-62-0 or 39445-23-3	5	5
Clay	01332-58-7	5	5

**Other Limits:** National Institute for Occupational Safety and Health (NIOSH). Recommended standard maximum permissible concentration=0.05 mg/M<sup>3</sup> (respirable free silica) as determined by a full-shift sample up to 10-hour



Product Types: QUIKRETE<sup>®</sup> DRY PACKAGED PORTLAND CEMENT BASED PRODUCTS (SERIES 4) MSDS E

working day, 40-hour work week. See NIOSH Criteria for a Recommended Standard Occupational Exposure to Crystalline Silica.

---

### SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

---

**Appearance:** Gray to gray-brown colored powder. Some products contain coarse aggregate. (Quikrete Vinyl Concrete Patcher available in white)

<b>Specific Gravity:</b>	2.6 to 3.15	<b>Melting Point</b>	2700 °F	<b>Boiling Point:</b>	2700 °F
<b>Vapor Pressure:</b>	None	<b>Vapor Density:</b>	None	<b>Evaporation Rate:</b>	None
<b>Solubility in Water:</b>	Slight	<b>Odor:</b>	None		

---

### SECTION IV - FIRE AND EXPLOSION HAZARD DATA

---

**Flammability:** Noncombustible and not explosive.

---

### SECTION V - REACTIVITY DATA

---

**Stability:** Stable.

**Incompatibility (Materials to Avoid):** Contact of silica with powerful oxidizing agents such as fluorine, chlorine trifluoride, manganese trioxide, oxygen difluoride, may cause fires.

**Hazardous Decomposition or By-products:** Silica will dissolve in Hydrofluoric Acid and produce a corrosive gas - silicon tetrafluoride.

**Hazardous Polymerization:** Will Not Occur.

**Condition to Avoid:** Keep dry until used to preserve product utility.

---

### SECTION VI - HEALTH HAZARD DATA

---

**Route(s) of Entry:** Inhalation, Skin, Ingestion

**Acute Exposure:** Product becomes alkaline when exposed to moisture. Exposure can dry the skin, cause alkali burns and effect the mucous membranes. Dust can irritate the eyes and upper respiratory system. Toxic effects noted in animals include, for acute exposures, alveolar damage with pulmonary edema.

**Chronic Exposure:** Dust can cause inflammation of the lining tissue of the interior of the nose and inflammation of the cornea. Hypersensitive individuals may develop an allergic dermatitis. Respirable crystalline silica (quartz) can cause silicosis, a fibrosis (scarring) of the lungs and possibly cancer. There is evidence that exposure to respirable silica or the disease silicosis is associated with an increased incidence of Scleroderma, tuberculosis and kidney disorders.

<b>Carcinogenicity Listings:</b>	NTP:	Known carcinogen
	OSHA:	Not listed as a carcinogen
	IARC Monographs:	Group 1 Carcinogen
	California Proposition 65:	Known carcinogen

**NTP:** The National Toxicology Program, in its "Ninth Report on Carcinogens" (released May 15, 2000) concluded that "Respirable crystalline silica (RCS), primarily quartz dusts occurring in industrial and occupational settings, is *known to be a human carcinogen*, based on sufficient evidence of carcinogenicity from studies in humans indicating a causal relationship between exposure to RCS and increased lung cancer rates in workers exposed to crystalline silica dust (reviewed in IAC, 1997; Brown *et al.*, 1997; Hind *et al.*, 1997)

**IARC:** The International Agency for Research on Cancer ("IARC") concluded that there was "*sufficient evidence* in humans for the carcinogenicity of crystalline silica in the forms of quartz or cristobalite from occupational sources", and that there is "*sufficient evidence* in experimental animals for the carcinogenicity of quartz or cristobalite." The

Product Types: QUIKRETE® DRY PACKAGED PORTLAND CEMENT BASED PRODUCTS (SERIES 4) MSDS E

overall IARC evaluation was that “crystalline silica inhaled in the form of quartz or cristobalite from occupational sources is *carcinogenic to humans* (Group 1).” The IARC evaluation noted that “carcinogenicity was not detected in all industrial circumstances or studies. Carcinogenicity may be dependent on inherent characteristics of the crystalline silica or on external factors affecting its biological activity or distribution of its polymorphs.” For further information on the IARC evaluation, see IARC Monographs on the Evaluation of carcinogenic Risks to Humans, Volume 68, “Silica, Some Silicates...” (1997)

**Signs and Symptoms of Exposure:** Symptoms of excessive exposure to the dust include shortness of breath and reduced pulmonary function. Excessive exposure to skin and eyes especially when mixed with water can cause caustic burns as severe as third degree.

**Medical Conditions Generally Aggravated by Exposure:** Individuals with sensitive skin and with pulmonary and/or respiratory disease, including, but not limited to, asthma and bronchitis, or subject to eye irritation, should be precluded from exposure. Exposure to crystalline silica or the disease silicosis is associated with increased incidence of scleroderma, Tuberculosis and possibly increased incidence of kidney lesions.

**Emergency First Aid Procedures:**

**Eyes:** Immediately flush eye thoroughly with water. Continue flushing eye for at least 15 minutes, including under lids, to remove all particles. Call physician immediately.

**Skin:** Wash skin with cool water and pH-neutral soap or a mild detergent. Seek medical treatment if irritation or inflammation develops or persists. Seek immediate medical treatment in the event of burns.

**Inhalation:** Remove person to fresh air. If breathing is difficult, administer oxygen. If not breathing, give artificial respiration. Seek medical help if coughing and other symptoms do not subside. Inhalation of large amounts of portland cement require immediate medical attention.

**Ingestion:** Do not induce vomiting. If conscious, have the victim drink plenty of water and call a physician immediately.

---

## SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE

---

**Spills:** If spilled, use dustless methods (vacuum) and place into covered container for disposal or use if not contaminated or wet. Use adequate ventilation.

**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 RCRA or CERCLA.

---

## SECTION VIII - CONTROL MEASURES/PERSONAL PROTECTION

---

**Inhalation:** DO NOT BREATHE DUST. In dusty environments, the use of an OSHA, MSHA or NIOSH approved respirator is recommended. Local exhaust can be used, if necessary, to control airborne dust levels.

**Eyes:** Wear tight fitting goggles.

**Skin:** The use of barrier creams or impervious gloves, boots and clothing to protect the skin from contact is recommended. Following work, workers should shower with soap and water. Precautions must be observed because burns occur with little warning -- little heat is sensed.

WARN EMPLOYEES AND/OR CUSTOMERS OF THE HAZARDS AND REQUIRED OSHA PRECAUTIONS ASSOCIATED WITH THE USE OF THIS PRODUCT.

---

**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.



# Material Safety Data Sheet [OSHA 29 CFR 1910.1200]

The QUIKRETE® Companies  
One Securities Centre  
3490 Piedmont Road, Suite 1300  
Atlanta, GA 30329

Emergency Telephone Number  
(770) 216-9580

Information Telephone Number  
(770) 216-9580

Revision: July 2003

MSDS F

## SECTION I: PRODUCT IDENTIFICATION

Product Types: QUIKRETE® UNSANDED PORTLAND CEMENT BASED PRODUCTS (SERIES 3)

<u>QUIKRETE® Product Name</u>	<u>Code #</u>	<u>QUIKRETE® Product Name</u>	<u>Code #</u>
UNSANDED TILE GROUT (DRY GROUT)	1552	BBOND MS	1234
BBond A	1222	Thin-Set Unsanded	1553
AQUABLEND	1225-60	AQUALIGHT	1225-62
BLOCBOND	1225-51	MUDJACKING GROUT	1585-11
OMNI GROUT UNSANDED	1491		
QUIKWALL® SURFACE BONDING CEMENT, UNSANDED			1220
POLYMER MODIFIED UNSANDED TILE GROUT			1492

## SECTION II - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

Hazardous Components	CAS No.	PEL (OSHA) mg/M <sup>3</sup>	TLV (ACGIH) mg/M <sup>3</sup>
Portland Cement	65997-15-1	5	5
May contain one or more of the following:			
Amorphous Silica (From Fly Ash )	07631-86-9	<u>80 mg/M<sup>3</sup></u> % SiO <sub>2</sub>	10
Alumina (From Fly Ash)	01344-28-1	5	5
Calcium Aluminate Cement	65997-16-2	5	5
Clay	01332-58-7	5	5
Pulverized Limestone	01317-65-3	5	5
Iron Oxide Pigments	01309-37-1	5	5
Silica Sand, crystalline	14808-60-7	<u>10</u> % SiO <sub>2</sub> +2	0.05 (respirable)
Calcium Sulfate	10101-41-4 or 13397-24-5	5	5
Lime	01305-62-0 or 39445-23-3	5	5

Although these products contain no intentionally added Silica, they may contain small amounts of silica occurring as natural impurities in other raw materials or from low levels of contamination occurring during the manufacturing process.

**Other Limits:** National Institute for Occupational Safety and Health (NIOSH). Recommended standard maximum permissible concentration=0.05 mg/M<sup>3</sup> (respirable free silica) as determined by a full-shift sample up to 10-hour working day, 40-hour work week. See NIOSH Criteria for a Recommended Standard Occupational Exposure to Crystalline Silica.



QUIKRETE® MATERIAL SAFETY DATA SHEET

page # 2

Product Types: QUIKRETE® UNSANDED PORTLAND CEMENT BASED PRODUCTS (SERIES 3)

MSDS F

Product Types: QUIKRETE<sup>®</sup> UNSANDED PORTLAND CEMENT BASED PRODUCTS (SERIES 3)

MSDS F

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**SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS**


---

**Appearance:** Gray to gray-brown colored powder. Some products available in white and other colors.**Specific Gravity:** 2.6 to 3.15    **Melting Point:** >2700 °F    **Boiling Point:** >2700 °F**Vapor Pressure:** None    **Vapor Density:** None    **Evaporation Rate:** None**Solubility in Water:** Slight    **Odor:** None

---

**SECTION IV - FIRE AND EXPLOSION HAZARD DATA**


---

**Flammability:** Noncombustible and not explosive.

---

**SECTION V - REACTIVITY DATA**


---

**Stability:** Stable.**Incompatibility (Materials to Avoid):** Contact of silica with powerful oxidizing agents such as fluorine, chlorine trifluoride, manganese trioxide, oxygen difluoride, may cause fires.**Hazardous Decomposition or By-products:** Silica will dissolve in Hydrofluoric Acid and produce a corrosive gas - silicon tetrafluoride.**Hazardous Polymerization:** Will Not Occur.**Condition to Avoid:** Keep dry until used to preserve product utility.

---

**SECTION VI - HEALTH HAZARD DATA**


---

**Route(s) of Entry:** Inhalation, Skin, Ingestion**Acute Exposure:** Product becomes alkaline when exposed to moisture. Exposure can dry the skin, cause alkali burns and effect the mucous membranes. Dust can irritate the eyes and upper respiratory system. Toxic effects noted in animals include, for acute exposures, alveolar damage with pulmonary edema.**Chronic Exposure:** Dust can cause inflammation of the lining tissue of the interior of the nose and inflammation of the cornea. Hypersensitive individuals may develop an allergic dermatitis. Respirable crystalline silica (quartz) can cause silicosis, a fibrosis (scarring) of the lungs and possibly cancer. There is evidence that exposure to respirable silica or the disease silicosis is associated with an increased incidence of Scleroderma, tuberculosis and kidney disorders.**Carcinogenicity Listings:**

NTP:	Known carcinogen
OSHA:	Not listed as a carcinogen
IARC Monographs:	Group 1 Carcinogen
California Proposition 65:	Known carcinogen

NTP: The National Toxicology Program, in its "Ninth Report on Carcinogens" (released May 15, 2000) concluded that "Respirable crystalline silica (RCS), primarily quartz dusts occurring in industrial and occupational settings, is *known to be a human carcinogen*, based on sufficient evidence of carcinogenicity from studies in humans indicating a causal relationship between exposure to RCS and increased lung cancer rates in workers exposed to crystalline silica dust (reviewed in IAC, 1997; Brown *et al.*, 1997; Hind *et al.*, 1997)IARC: The International Agency for Research on Cancer ("IARC") concluded that there was "*sufficient evidence* in humans for the carcinogenicity of crystalline silica in the forms of quartz or cristobalite from occupational sources", and that there is "*sufficient evidence* in experimental animals for the carcinogenicity of quartz or cristobalite." The overall IARC evaluation was that "crystalline silica inhaled in the form of quartz or cristobalite from occupational sources is *carcinogenic to humans* (Group 1)." The IARC evaluation noted that "carcinogenicity was not detected in all industrial circumstances or studies. Carcinogenicity may be dependent on inherent characteristics of the crystalline

Product Types: QUIKRETE<sup>®</sup> UNSANDED PORTLAND CEMENT BASED PRODUCTS (SERIES 3)

MSDS F

silica or on external factors affecting its biological activity or distribution of its polymorphs.” For further information on the IARC evaluation, see IARC Monographs on the Evaluation of carcinogenic Risks to Humans, Volume 68, “Silica, Some Silicates...” (1997)

**Signs and Symptoms of Exposure:** Symptoms of excessive exposure to the dust include shortness of breath and reduced pulmonary function. Excessive exposure to skin and eyes especially when mixed with water can cause caustic burns as severe as third degree.

**Medical Conditions Generally Aggravated by Exposure:** Individuals with sensitive skin and with pulmonary and/or respiratory disease, including, but not limited to, asthma and bronchitis, or subject to eye irritation, should be precluded from exposure. Exposure to crystalline silica or the disease silicosis is associated with increased incidence of scleroderma, Tuberculosis and possibly increased incidence of kidney lesions.

**Emergency First Aid Procedures:**

**Eyes:** Immediately flush eye thoroughly with water. Continue flushing eye for at least 15 minutes, including under lids, to remove all particles. Call physician immediately.

**Skin:** Wash skin with cool water and pH-neutral soap or a mild detergent. Seek medical treatment if irritation or inflammation develops or persists. Seek immediate medical treatment in the event of burns.

**Inhalation:** Remove person to fresh air. If breathing is difficult, administer oxygen. If not breathing, give artificial respiration. Seek medical help if coughing and other symptoms do not subside. Inhalation of large amounts of portland cement require immediate medical attention.

**Ingestion:** Do not induce vomiting. If conscious, have the victim drink plenty of water and call a physician immediately.

---

## SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE

---

**Spills:** If spilled, use dustless methods (vacuum) and place into covered container for disposal or use if not contaminated or wet. Use adequate ventilation.

**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 RCRA or CERCLA.

---

## SECTION VIII - CONTROL MEASURES/PERSONAL PROTECTION

---

**Inhalation:** DO NOT BREATHE DUST. In dusty environments, the use of an OSHA, MSHA or NIOSH approved respirator is recommended. Local exhaust can be used, if necessary, to control airborne dust levels.

**Eyes:** Wear tight fitting goggles.

**Skin:** The use of barrier creams or impervious gloves, boots and clothing to protect the skin from contact is recommended. Following work, workers should shower with soap and water. Precautions must be observed because burns occur with little warning -- little heat is sensed.

WARN EMPLOYEES AND/OR CUSTOMERS OF THE HAZARDS AND REQUIRED OSHA PRECAUTIONS ASSOCIATED WITH THE USE OF THIS PRODUCT.

---

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# Material Safety Data Sheet [OSHA 29 CFR 1910.1200]

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One Securities Centre  
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(770) 216-9580

Information Telephone Number  
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Revision: July 2003

MSDS FF

---

## SECTION I: PRODUCT IDENTIFICATION

---

Product type: Caulks and Joint Sealants

<u>QUIKRETE® Product Name</u>	<u>Code #</u>	<u>QUIKRETE® Product Name</u>	<u>Code #</u>
BLACKTOP REPAIR	8630-10	MORTAR REPAIR	8620-09
CONCRETE REPAIR	8620-10	CAULK AND JOINT SEALANT	8620-14, 15

---

## SECTION II - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

---

Hazardous Components	CAS No.	PEL (OSHA) mg/M <sup>3</sup>	TLV (ACGIH) mg/M <sup>3</sup>
Limestone/Marble	1317-65-3	5	5
Acrylic Polymer	Not Hazardous	None	None
May contain:			
Titanium Dioxide	13463-67-7	15	10

---

## SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

---

**Solubility in Water:** - Dilutable.

**Physical Appearance and Odor:** White or tinted viscous liquid with a slight ether and ammonia odor. Contains granular white fillers.

**Boiling Point:** ~100 C (212 ° F)

**Freezing Point:** ~ -1 C (30 ° F)

---

## SECTION IV - FIRE AND EXPLOSION HAZARD DATA

---

**Unusual Hazards:** This water based dispersion can splatter at temperatures above 100 ° C (212 ° F). Polymer film can burn once the water has evaporated. Product also may contain less than 1 % of a solvent with a Flash Point of 120 ° C (248 ° F)

**Extinguishing Agents:** Use methods appropriate for surrounding fire.

**Personal Protective Equipment:** For fire fighting, wear self-contained breathing apparatus and full protective gear.

---

## SECTION V - REACTIVITY DATA

---

**Stability:** This material is considered stable. However, avoid temperatures above 177C/350F, the onset of polymer decomposition. Thermal decomposition is dependent on time and temperature.

**Hazardous Decomposition Products:** Thermal decomposition may yield acrylic monomers.

**Hazardous Polymerization:** Will not occur.

**Incompatibility:** Avoid contact with strong oxidizing agents or strong alkalis.



Product type: Caulks and Joint Sealants

MSDS FF

Product type: Caulks and Joint Sealants

MSDS FF

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**SECTION VI - HEALTH HAZARD DATA**

---

<b>Route(s) of Entry:</b>	Inhalation?	Yes
	Skin?	Yes
	Ingestion?	Yes

**HEALTH EFFECTS FROM OVEREXPOSURE**

**Inhalation of vapor or mist can cause the following:** headache - nausea - irritation of nose, throat, and lungs

**Eye Contact:** Direct contact with material can cause irritation and possible corneal injury.

**Skin Contact:** Prolonged or repeated skin contact can cause slight irritation.

**FIRST AID:**

**Skin:** Thoroughly wash affected area with soap and water. Remove contaminated clothing.

**Eye Contact:** Flush with large amounts of water, lifting the upper and lower lids occasionally. Do not rub eyes. Product contains granular fillers, which can scratch the cornea. Get medical attention.

**Ingestion:** If swallowed, give two glasses of water. If large amounts are ingested, induce vomiting with Ipecac syrup or by placing finger at the back of the throat. Never give anything by mouth to an unconscious person. Get medical attention.

**Inhalation:** Remove to fresh air if effects occur. Consult physician.

---

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

---

**AVOID SKIN AND EYE CONTACT AND AVOID BREATHING VAPORS.**

**Storage Conditions:** Keep from freezing; material may coagulate. The minimum recommended storage temperature for this material is 1 ° C/34 ° F. The maximum recommended storage temperature for this material is 38 ° C/100 ° F.

**PERSONAL PROTECTIVE EQUIPMENT:**

**Eye protection:** not required.

**Hand protection:** Neoprene gloves are recommended. Gloves of other chemically resistant materials may not provide adequate protection.

---

**SECTION VIII - CONTROL MEASURES**

---

**Spill and leak handling:**

Keep spectators away. Contain spills immediately with inert materials (e.g. sand, earth). Scrape up and allow to harden before disposal. Use detergent and water to remove the remaining residue.

**Ventilation:**

Use in a well-ventilated area.

**WASTE DISPOSAL**

Allow to harden. Dispose in landfill as a non-hazardous waste in accordance with local, state, and federal regulations.

---

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# Material Safety Data Sheet [OSHA 29 CFR 1910.1200]

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Revision: July 2003

MSDS G

---

## SECTION I: PRODUCT IDENTIFICATION

---

**QUIKRETE® Product Name**  
CHEMICALLY HYDRATED LIME

**Code #**  
9907

---

## SECTION II - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

---

Hazardous Components	CAS No.	PEL (OSHA) mg/M <sup>3</sup>	TLV (ACGIH) mg/M <sup>3</sup>
Hydrated Lime	1305-62-0 or 39445-23-3	5	5

---

## SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

---

<b>Appearance:</b>	White powder	<b>Specific Gravity:</b>	2.2 to 2.6
<b>Melting Point:</b>	NA	<b>Boiling Point:</b>	>2850 ° C
<b>Vapor Pressure:</b>	None	<b>Vapor Density:</b>	None
<b>Evaporation Rate:</b>	None	<b>Solubility in Water:</b>	0.1g/100 g
<b>Odor:</b>	Low	<b>pH @ 25 C (Saturated):</b>	11.7

---

## SECTION IV - FIRE AND EXPLOSION HAZARD DATA

---

**Flammability:** Noncombustible and not explosive.

---

## SECTION V - REACTIVITY DATA

---

**Stability:** Stable.

Is not incompatible with other materials, will not decompose into hazardous by-products and will not polymerize.  
Keep dry until used to preserve product utility.

---

## SECTION VI - HEALTH HAZARD DATA

---

Route of entry(s):

Inhalation: Yes

Skin: Yes

Ingestion: Yes

Strongly alkaline material; contact with eyes will cause irritation and possible corrosion damage.

**Skin:** Contact causes irritation and may cause burns to skin.



Product Name: CHEMICALLY HYDRATED LIME

MSDS G

**Ingestion:** May be corrosive to the digestive tract.

**Inhalation:** Irritating to respiratory tract and can be damaging to the mucous membrane of the upper respiratory tract.

**Chronic:** No sub-acute problems known.

**First Aid:** Dust in Eyes: Flush with running water for 15 minutes, including under lids. Skin: Wash with soap and water. Dust inhalation: Remove to fresh air. If ingested: Dilute by giving 2 glasses of milk or water to drink, followed by fruit juices or diluted vinegar to neutralize the alkali, then, consult physician.

---

#### SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE

---

If spilled can be cleaned up using dry methods that do not disperse dust into the air. Avoid creating excessive dust. Can be treated as a common waste for disposal or returned to the container for later use if it is not contaminated or wet.

---

#### SECTION VIII - CONTROL MEASURES

---

In dusty environments, the use of an OSHA, MSHA or NIOSH approved respirator and tight fitting goggles is recommended.

Local exhaust can be used, if necessary, to control airborne dust levels.

---

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# Material Safety Data Sheet [OSHA 29 CFR 1910.1200]

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MSDS H

---

## SECTION I: PRODUCT IDENTIFICATION

---

<u>QUIKRETE® Product Name</u>	<u>Code #</u>
CONCRETE ACRYLIC FORTIFIER	8610
CONCRETE ACRYLIC FORTIFIER, CONCENTRATED	8611

---

## SECTION II - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

---

Hazardous Components	CAS No.	PEL (OSHA) mg/M <sup>3</sup>	TLV (ACGIH) mg/M <sup>3</sup>
Acrylic Polymer May Contain:	--	---	---
Ammonia	7664-41-7	35	18

---

## SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

---

<b>Physical appearance:</b>	Milky white liquid	<b>Odor:</b>	slight ammonia odor
<b>Solubility in Water:</b>	Dilutable	<b>Melting point:</b>	32° F water
<b>Viscosity:</b>	50 cps max.	<b>pH</b>	9.5-10.0
<b>Boiling point:</b>	~100°C/212°F		

---

## SECTION IV - FIRE AND EXPLOSION HAZARD DATA

---

**Flammability:** Noncombustible and not explosive.

---

## SECTION V - REACTIVITY DATA

---

**Stability:** Stable.

---

## SECTION VI - HEALTH HAZARD DATA

---

**Inhalation:** Vapor or mist can cause headache, nausea, and irritation of the nose, throat and lungs.

**Skin Contact:** Irritating to skin upon repeated or prolonged contact.

**Eye Contact:** Slightly irritating to eyes.**First Aid:**

**Inhalation:** Move subject to fresh air.



Product Name: CHEMICALLY HYDRATED LIME

MSDS H

**Eye and skin contact:** Flush eyes with a large amount of water for at least 15 minutes. See a physician if irritation persists. Wash affected skin areas with soap and water.

---

### SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE

---

Rubber protection gloves are recommended. Use safety goggles when splash potential exists.

If material is released or spilled, dam up to limit spreading. Mop up or absorb on inert material and place in containers. If spill occurs in enclosed area, ventilate. Polymer may be separated from water by addition of alum and ferric chloride.

Note: Spilled emulsion is very slippery. Use care to avoid falls. Latex will leave a film on drying. Remove saturated clothing and wash contacted skin areas with soap and water.

Waste Disposal: For large quantities, place in settling pond and add ferric chloride and lime. Decant water. Dispose of solids in landfill. Emulsion can be incinerated directly under appropriate conditions.

---

### SECTION VIII - CONTROL MEASURES

---

Normal cleanliness should be observed. Store in a cool place, avoid freezing.

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# Material Safety Data Sheet

## [OSHA 29 CFR 1910.1200]

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MSDS HH

### SECTION I: PRODUCT IDENTIFICATION

<u>QUIKRETE® Product Name</u>	<u>Code #</u>
BLACKTOP PATCH	1701-50
COMMERCIAL GRADE BLACKTOP PATCH	1701-62

### SECTION II - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

Hazardous Components	CAS No.	PEL (OSHA) mg/M <sup>3</sup>	TLV (ACGIH) mg/M <sup>3</sup>
Crushed Limestone	01317-65-3	5	5
Petroleum Asphalt	8052-42-4	5 (2)	
Silica sand, crystalline (1)	14808-60-7	<u>10</u> %SiO <sub>2+2</sub>	0.05 (respirable)
May contain one of the following:			
Diesel fuel/Kerosene			100 (3)
Petroleum Distillates (Naphtha)	8030-30-6	100 ppm	100 ppm

(1) Silica is a natural occurring constituent in Limestone. The silica in this product is in a liquid suspension and is not expected to be in a respirable form under normal usage conditions.

(2) In 1997 the ACGH proposed lowering the exposure limit for petroleum asphalt to 0.5 mg/M<sup>3</sup>.

(3) In 1997 the ACGH proposed an exposure limit of 100 mg/M<sup>3</sup>. This agency is also proposing to list these materials as category A3 carcinogens. Category A3 carcinogens have been shown to be carcinogenic to animals at relatively high doses of exposure when tested in a manner which is not considered to be relevant to worker exposure.

**Other Limits:** National Institute for Occupational Safety and Health (NIOSH). Recommended standard maximum permissible concentration=0.05 mg/M<sup>3</sup> (respirable free silica) as determined by a full-shift sample up to 10-hour working day, 40-hour work week. See NIOSH Criteria for a Recommended Standard Occupational Exposure to Crystalline Silica.

### SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

**Boiling Point:** (1) 105-338 F (40-170 C)

**Vapor Pressure:** (1) 10-200 mm Hg @ 68 F (20 C)

**Vapor Density:** >4

**Solubility in Water:** Negligible

**Appearance and Odor:** Black semi-solid material with a hydrocarbon odor

(1) Properties of asphalt binder portion of the product.

**Specific Gravity:** Approximately 2.25

**Melting Point:** (1) 100-135 F (38-57 C)

**Evaporation Rate:** (1) >0.1





Product: Blacktop Patch and Commercial Grade Blacktop Patch

MSDS HH

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**SECTION IV - FIRE AND EXPLOSION HAZARD DATA**

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**Flash Point (Method Used):** 150°F Minimum (Pensky-Martin Closed Cup Method - ASTM D93)**Flammable Limits:** LEL: 0.05 VEL: 5**Extinguishing Media:** Water spray, Dry chemical, Foam or Carbon dioxide. Water or foam may cause frothing.**Special Fire Fighting Procedures:** Self-contained Breathing apparatus required for enclosed areas. Avoid breathing vapors for long periods.**Unusual Fire and Explosion Hazards:** Do not store with strong oxidants. Storage at elevated temperatures may cause release of flammable vapors in open air or explosive vapors in confined spaces. Can cause the creation of carbon monoxide, carbon dioxide, and hydrocarbons.

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**SECTION V - REACTIVITY DATA**

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**Stability:** Stable**Incompatibility (Materials to Avoid):** Strong Oxidizers like liquid oxygen, sodium or calcium hypochlorite**Hazardous Decomposition or Byproducts:** Incomplete combustion can yield carbon monoxide, and oxides of sulfur and nitrogen and various hydrocarbons.**Hazardous Polymerization:** Will not occur

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**SECTION VI - HEALTH HAZARD DATA**

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<b>Routes of Entry:</b>	Inhalation?	Yes
	Skin?	Yes
	Ingestion?	Yes

**Health Hazard Data:**

**Carcinogenicity:** No association has been established between industrial exposure to petroleum asphalt and cancer in humans. The International Agency for Research on Cancer (IRAC) reviewed the carcinogenic potential of asphalts in monograph 35. They conclude that there was insufficient evidence that undiluted, air-refined asphalt was carcinogenic to animals, while there was only limited evidence that steam-refined asphalts were carcinogenic to animals. Additionally there was insufficient evidence to conclude that asphalts were carcinogenic to human beings. Studies in which mice were exposed to a variety of whole asphalts did not result in any increased cancer rate; mice exposed to asphalts diluted with hydrocarbon solvents had increased incidence of certain types of cancer. Brief or intermittent skin contact with this asphalt product is not expected to produce any delayed effects. While normal handling of this product is not likely to cause cancer in humans, skin contact and breathing of mists, fumes, or vapors should be reduced to a minimum.

**Signs and Symptoms of Exposure:** Possible effects include headache, nasal, eye, skin and respiratory irritation, nausea; fatigue; drowsiness; pneumonitis; pulmonary edema & central nervous system depression.

Aspiration hazard if ingested.

**Medical Conditions Generally Aggravated by Exposure:**

**Emergency and First Aid Procedure:**

**Ingestion:** Do not induce vomiting. GET MEDICAL ATTENTION PROMPTLY!

**Inhalation:** Move exposed person to fresh air.

**Eye Contact:** Flush eyes immediately with water for 15 minutes, occasionally lifting lower and upper lids.

**Skin Contact:** Flush with soap and water.

Product: Blacktop Patch and Commercial Grade Blacktop Patch

MSDS HH

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

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**Steps to be Taken in Case Material is Released or Spilled:** Remove from bodies of water. Shovel into containers for reuse or disposal in accordance with local, state and federal guidelines.

**Waste Disposal Method:** Recover and recycle as much as possible. Dispose of unusable material via licensed waste disposal Company in accordance with local, state and federal guidelines.

**Precautions to be Taken in Handling and Storing:** Do not store with strong oxidizers. Store as OSHA Class IIIA Combustible material. Store away from heat and open flames.

**Other Precautions:** Do not use solvents or abrasive cleaners to wash exposed skin

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**SECTION VIII - CONTROL MEASURES**

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**Respiratory Protection:** NIOSH/MSHA approved hydrocarbon vapor or supplied respiratory protection required in confined spaces

**Ventilation:** Use out doors or use Local Exhaust with a minimum face velocity of 60 fpm

**Protective Gloves:** Rubber gloves to avoid skin contact.

**Eye Protection:** Use splash goggles and face shields when eye/face contact may occur.

**Other Protective Clothing or Equipment:** Long sleeved shirts and cuffless pants to avoid skin contact.

**Work/Hygienic Practices:** Normal washing with soap and water after handling.

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**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.



# Material Safety Data Sheet [OSHA 29 CFR 1910.1200]

The QUIKRETE® Companies  
One Securities Centre  
3490 Piedmont Road, Suite 1300  
Atlanta, GA 30329

Emergency Telephone Number  
(770) 216-9580

Information Telephone Number  
(770) 216-9580

Revision: July 2003

MSDS J

## SECTION I: PRODUCT IDENTIFICATION

Product Types: QUIKRETE® DRY PACKAGED PORTLAND CEMENT BASED PRODUCTS (SERIES 1)

<u>QUIKRETE® Product Name</u>	<u>Code #</u>	<u>QUIKRETE® Product Name</u>	<u>Code #</u>
CONCRETE MIX	1101	FENCE POST MIX	1005
FIBER REINFORCED CONCRETE	1006	CRACK RESISTANT CONCRETE	1006-80
QUIKRETE® 5000	1007	LIGHT WEIGHT CONCRETE	1008
FAST SETTING CONCRETE	1004	RIP RAP	1129
SAND MIX	1103	VINYL CONCRETE PATCHER	1133, 1132
BASIC CONCRETE MIX	1015-60	HANDI-CRETE CONCRETE	1141
LIGHT WEIGHT SAND MIX	1103-51	HANDI-CRETE SAND MIX	1143
HIGH YIELD CONCRETE	1100	B-CRETE	1101-81
COMMERCIAL GRADE FASTSET™ CEMENT			1124-92
COMMERCIAL GRADE FASTSET™ NON SHRINK GROUT			1585-09
COMMERCIAL GRADE FASTSET™ REPAIR MORTAR			1241-60
COMMERCIAL GRADE FASTSET™ CONCRETE			1004-51
COARSE & FINE CORE FILL GROUTS (MASONRY GROUTS)			SR-9003, SR-9006

(ALSO APPLIES TO CUSTOM BLENDED AND PRIVATE LABEL CONCRETES AND MORTARS)

## SECTION II - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

Hazardous Components	CAS No.	PEL (OSHA) mg/M <sup>3</sup>	TLV (ACGIH) mg/M <sup>3</sup>
Silica Sand, crystalline	14808-60-7	<u>10</u> % SiO <sub>2</sub> +2	0.05 (respirable)
Portland Cement	65997-15-1	5	5
Lime	01305-62-0	5	5
May contain one or more of the following:			
Amorphous Silica		<u>80 mg/M<sup>3</sup></u>	10
(From Fly Ash )	07631-86-9	% SiO <sub>2</sub>	
Alumina (From Fly Ash)	01344-28-1	5	5
Limestone Dust	01317-65-3	5	5
Calcium Sulfate	10101-41-4 or 13397-24-5	5	5
Calcium Sulfo Aluminate	65997-16-2	15	10

Other Limits: NIOSH has recommended that the permissible exposure limit be changed to 50 micrograms respirable



free silica per cubic meter of air ( $50 \text{ ug/M}^3$ ) averaged over a work shift of up to 10 hours per day, 40 hours per week. The NIOSH Criteria Document for Crystalline Silica should be consulted for more detailed information.

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**SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS**


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**Appearance:** Gray to gray-brown colored powder. Some products contain coarse aggregate. (QUIKRETE Vinyl Concrete Patcher available in white)

<b>Specific Gravity:</b>	2.6 to 3.15	<b>Melting Point:</b>	>2700 °F	<b>Boiling Point:</b>	>2700 °F
<b>Vapor Pressure:</b>	None	<b>Vapor Density:</b>	None	<b>Evaporation Rate:</b>	None
<b>Solubility in Water:</b>	Slight	<b>Odor:</b>	None	<b>Solubility in Water:</b>	Slight

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**SECTION IV - FIRE AND EXPLOSION HAZARD DATA**


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Non combustible and not explosive.

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**SECTION V - REACTIVITY DATA**


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**Stability:** Stable.

**Incompatibility (Materials to Avoid):** Contact of silica with powerful oxidizing agents such as fluorine, chlorine trifluoride, manganese trioxide, oxygen difluoride, may cause fires.

**Hazardous Decomposition or Byproducts:** Silica will dissolve in Hydrofluoric Acid and produce a corrosive gas - silicon tetrafluoride.

**Hazardous Polymerization:** Will not occur.

**Condition to Avoid:** Keep dry until used to preserve product utility.

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**SECTION VI - HEALTH HAZARD DATA**


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<b>Route(s) of Entry:</b>	Inhalation?	Yes
	Skin?	Yes
	Ingestion?	Yes

**Acute Exposure:** Product becomes alkaline when exposed to moisture. Exposure can dry the skin, cause alkali burns and effect the mucous membranes. Dust can irritate the eyes and upper respiratory system. Toxic effects noted in animals include, for acute exposures, alveolar damage with pulmonary edema.

**Chronic Exposure:** Dust can cause inflammation of the lining tissue of the interior of the nose and inflammation of the cornea. Hypersensitive individuals may develop an allergic dermatitis. Respirable crystalline silica (quartz) can cause silicosis, a fibrosis (scarring) of the lungs and possibly cancer. There is evidence that exposure to respirable silica or the disease silicosis is associated with an increased incidence of Scleroderma, tuberculosis and kidney disorders.

<b>Carcinogenicity Listings:</b>	NTP:	Known carcinogen
	OSHA:	Not listed as a carcinogen
	IARC Monographs:	Group 1 Carcinogen
	California Proposition 65:	Known carcinogen

**NTP:** The National Toxicology Program, in its "Ninth Report on Carcinogens" (released May 15, 2000) concluded that "Respirable crystalline silica (RCS), primarily quartz dusts occurring in industrial and occupational settings, is *known to be a human carcinogen*, based on sufficient evidence of carcinogenicity from studies in humans indicating a causal relationship between exposure to RCS and increased lung cancer rates in workers exposed to crystalline silica dust (reviewed in IAC, 1997; Brown *et al.*, 1997; Hind *et al.*, 1997)

## QUIKRETE® DRY PACKAGED PORTLAND CEMENT BASED PRODUCTS (SERIES 1)

MSDS J

**IARC:** The International Agency for Research on Cancer (“IARC”) concluded that there was “*sufficient evidence* in humans for the carcinogenicity of crystalline silica in the forms of quartz or cristobalite from occupational sources”, and that there is “*sufficient evidence* in experimental animals for the carcinogenicity of quartz or cristobalite.” The overall IARC evaluation was that “crystalline silica inhaled in the form of quartz or cristobalite from occupational sources is *carcinogenic to humans* (Group 1).” The IARC evaluation noted that “carcinogenicity was not detected in all industrial circumstances or studies. Carcinogenicity may be dependent on inherent characteristics of the crystalline silica or on external factors affecting its biological activity or distribution of its polymorphs.” For further information on the IARC evaluation, see IARC Monographs on the Evaluation of carcinogenic Risks to Humans, Volume 68, “Silica, Some Silicates...” (1997)

**Signs and Symptoms of Exposure:** Symptoms of excessive exposure to the dust include shortness of breath and reduced pulmonary function. Excessive exposure to skin and eyes especially when mixed with water can cause caustic burns as severe as third degree.

**Medical Conditions Generally Aggravated by Exposure:** Individuals with sensitive skin and with pulmonary and/or respiratory disease, including, but not limited to, asthma and bronchitis, or subject to eye irritation, should be precluded from exposure.

**Emergency First Aid Procedures:**

**Eyes:** Immediately flush eye thoroughly with water. Continue flushing eye for at least 15 minutes, including under lids, to remove all particles. Call physician immediately.

**Skin:** Wash skin with cool water and pH-neutral soap or a mild detergent. Seek medical treatment if irritation or inflammation develops or persists. Seek immediate medical treatment in the event of burns.

**Inhalation:** Remove person to fresh air. If breathing is difficult, administer oxygen. If not breathing, give artificial respiration. Seek medical help if coughing and other symptoms do not subside. Inhalation of large amounts of portland cement require immediate medical attention.

**Ingestion:** Do not induce vomiting. If conscious, have the victim drink plenty of water and call a physician immediately.

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

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**Spills:** If spilled, use dustless methods (vacuum) and place into covered container for disposal or use if not contaminated or wet. Use adequate ventilation.

**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 RCRA or CERCLA.

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**SECTION VIII - CONTROL MEASURES**

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**Inhalation:** DO NOT BREATHE DUST. In dusty environments, the use of an OSHA, MSHA or NIOSH approved respirator is recommended. Local exhaust can be used, if necessary, to control airborne dust levels.

**Eyes:** Wear tight fitting goggles.

**Skin:** The use of barrier creams or impervious gloves, boots and clothing to protect the skin from contact is recommended. Following work, workers should shower with soap and water. Precautions must be observed because burns occur with little warning -- little heat is sensed.

WARN EMPLOYEES AND/OR CUSTOMERS OF THE HAZARDS AND REQUIRED OSHA PRECAUTIONS ASSOCIATED WITH THE USE OF THIS PRODUCT.

---

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.



# Material Safety Data Sheet [OSHA 29 CFR 1910.1200]

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One Securities Centre  
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Atlanta, GA 30329

Emergency Telephone Number  
(770) 216-9580

Information Telephone Number  
(770) 216-9580

Revision: July 2003

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## SECTION I: PRODUCT IDENTIFICATION

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<u>QUIKRETE® Product Name</u>	<u>Code #</u>
FLY ASH	5009

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## SECTION II - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

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Fly ash composition is variable depending on coal source and power plant characteristics.  
Fly ash has a respirable particle size distribution.

Component	Formula	OSHA PEL	ACGIH TLV	Typical %
Silica: Amorphous	SiO <sub>2</sub>	80mg/m <sup>3</sup> /%SiO <sub>2</sub>	10mg/m <sup>3</sup>	16.6-45.6
Silica: Crystalline (Respirable)	SiO <sub>2</sub>	10mg/m <sup>3</sup> /(%SiO <sub>2</sub> +2)	0.05 mg/m <sup>3</sup>	3.4-9.4
Alumina (Respirable)	Al <sub>2</sub> O <sub>3</sub>	5mg/m <sup>3</sup>	5mg/m <sup>3</sup>	10-35
Calcium Oxide	CaO	5mg/m <sup>3</sup>	2mg/m <sup>3</sup>	0.5-32
Titanium Dioxide (Respirable)	TiO <sub>2</sub>	5mg/m <sup>3</sup>	5mg/m <sup>3</sup>	0.33-2
Ferric Oxide	Fe <sub>2</sub> O <sub>3</sub>	10mg/m <sup>3</sup>	5mg/m <sup>3</sup>	3-24
Magnesium Oxide	MgO	15mg/m <sup>3</sup>	10mg/m <sup>3</sup>	0.5-8

Materials present at less than 12% and greater than 0.5%, and not listed in OSHA or ACGIH include Potassium Oxide, Sodium Oxide, Sulfur Trioxide, and Carbon.

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## SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

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<b>Boiling Point F:</b>	N/A	<b>pH:</b>	N/A
<b>Solubility in Water:</b>	N/A	<b>Specific Gravity:</b>	N/A
<b>Appearance and Odor:</b> Grayish white or black powder; odorless.			

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## SECTION IV - FIRE AND EXPLOSION HAZARD DATA

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**Flash Point (Test Method):** N/A  
**Flammable Limits in Air Percent by Volume: Lower:** N/A    **Upper:** N/A  
**Extinguishing Media:** N/A  
**Special Fire Fighting:** N/A  
**Unusual and Explosion Hazards:** None

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## SECTION V - REACTIVITY DATA

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**Stability:** Stable



Product: Fly Ash

MSDS JJ

**Conditions to Avoid:** None known.**Incompatibility (Materials to Avoid):** None known.**Hazardous Decomposition or Byproducts:** None known.**Hazardous Polymerization:** Will Not Occur **Conditions to Avoid:** None known.

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## SECTION VI - HEALTH HAZARD DATA

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**Effects of Overexposure:****Acute:** Irritation of eyes, skin and mucous membranes.**Chronic:** Fibrotic diseases of the lungs and potential carcinogenicity.**Emergency and First Aid Procedures:****Skin:** Wash with mild soap and water.**Ingestion:** Keep warm, at rest, and drink large amounts of water. See Physician.**Eyes:** Flush with water for 15 minutes. See Physician.**Inhalation:** Move to fresh air.**Medical Conditions Aggravated by Exposure:** Persons with history of respiratory illness and reduced pulmonary function should avoid work places with high dust levels. Persons with skin disorders may experience aggravation of the condition.**Chronic Exposure:** Dust can cause inflammation of the lining tissue of the interior of the nose and inflammation of the cornea. Hypersensitive individuals may develop an allergic dermatitis. Fly ash contains a small percentage of respirable crystalline silica. Respirable crystalline silica (quartz) can cause silicosis, a fibrosis (scarring) of the lungs and possibly cancer. There is evidence that exposure to respirable silica or the disease silicosis is associated with an increased incidence of Scleroderma, tuberculosis and kidney disorders.

**Carcinogenicity Listings:**

NTP:	Known carcinogen
OSHA:	Not listed as a carcinogen
IARC Monographs:	Group 1 Carcinogen
California Proposition 65:	Known carcinogen

**NTP:** The National Toxicology Program, in its "Ninth Report on Carcinogens" (released May 15, 2000) concluded that "Respirable crystalline silica (RCS), primarily quartz dusts occurring in industrial and occupational settings, is *known to be a human carcinogen*, based on sufficient evidence of carcinogenicity from studies in humans indicating a causal relationship between exposure to RCS and increased lung cancer rates in workers exposed to crystalline silica dust (reviewed in IAC, 1997; Brown *et al.*, 1997; Hind *et al.*, 1997)

**IARC:** The International Agency for Research on Cancer ("IARC") concluded that there was "*sufficient evidence* in humans for the carcinogenicity of crystalline silica in the forms of quartz or cristobalite from occupational sources", and that there is "*sufficient evidence* in experimental animals for the carcinogenicity of quartz or cristobalite." The overall IARC evaluation was that "crystalline silica inhaled in the form of quartz or cristobalite from occupational sources is *carcinogenic to humans* (Group 1)." The IARC evaluation noted that "carcinogenicity was not detected in all industrial circumstances or studies. Carcinogenicity may be dependent on inherent characteristics of the crystalline silica or on external factors affecting its biological activity or distribution of its polymorphs." For further information on the IARC evaluation, see IARC Monographs on the Evaluation of carcinogenic Risks to Humans, Volume 68, "Silica, Some Silicates..." (1997)

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## SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE

---

**Steps to be Taken if Materials Released or Spilled:** Clean up material for use or disposal. Dampen with a water mist to control dust (airborne dust) before removal. Do not use compressed air. If loaded on trucks, wet down ash to prevent dusting during transport.



Product: Fly Ash

MSDS JJ

**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 RCRA or CERCLA.

Product: Fly Ash

MSDS JJ

---

**SECTION VIII - CONTROL MEASURES**

---

DO NOT BREATHE DUST. In dusty environments, the use of an OSHA, MSHA or NIOSH approved respirator and tight fitting goggles is recommended. Local exhaust can be used, if necessary, to control airborne dust levels.

**Ventilation:** Local Exhaust: When feasible, use dust collector.

**Protective Gloves:** Normal work gloves.

**Eye Protection:** Safety goggles in dusty operations.

**Other Protective Equipment:** Recommended coveralls in high concentration conditions.

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**SECTION IX - SPECIAL PRECAUTIONS**

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**Handling and Storage:** Store in dry conditions.

**Other Precautions:** Avoid creating dust and practice good hygiene; wash hands and face prior to eating and drinking.

WARN EMPLOYEES AND/OR CUSTOMERS OF THE HAZARDS AND REQUIRED OSHA PRECAUTIONS ASSOCIATED WITH THE USE OF THIS PRODUCT.

---

**NOTE:** The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind expressed or implied is made with respect to the information contained herein.



# Material Safety Data Sheet

## [OSHA 29 CFR 1910.1200]

The QUIKRETE® Companies  
One Securities Centre  
3490 Piedmont Road, Suite 1300  
Atlanta, GA 30329

Emergency Telephone Number  
(770) 216-9580

Information Telephone Number  
(770) 216-9580

Revision: July 2003

MSDS K

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### SECTION I: PRODUCT IDENTIFICATION

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Product Types: QUIKRETE® DRY PACKAGED PORTLAND CEMENT BASED PRODUCTS (SERIES 5)

<u>QUIKRETE® Product Name</u>	<u>Code #</u>	<u>QUIKRETE® Product Name</u>	<u>Code #</u>
QUIKRETE® PORTLAND CEMENT	1124	QUIKRETE® MASONRY CEMENT	1125-70
QUIKRETE® PORTLAND/LIME CEMENT	1124-06	PORTLAND/POZZOLAN CEMENT	1118-35
CEMENT	1125-21	GROUT-TYPE A	1585-04
PLASTIC CEMENT	2121		

(ALSO APPLIES TO OTHER SPECIALTY PORTLAND OR MASONRY CEMENTS)

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### SECTION II - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

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Hazardous Components	CAS No.	PEL (OSHA) mg/M <sup>3</sup>	TLV (ACGIH) mg/M <sup>3</sup>
Portland Cement	65997-15-1	5	5
May contain: Silica Sand, crystalline	14808-60-7	$\frac{10}{\% \text{SiO}_2+2}$	0.05 (respirable)
Pulverized Limestone	01317-65-3	5	5
Fly Ash	68131-74-8	5	5
Gypsum	10101-41-4	5	5
Lime	01305-62-0	5	5

Although these products contain no intentionally added Silica, they may contain small amounts of silica occurring as natural impurities in the other raw materials.

**Other Limits:** National Institute for Occupational Safety and Health (NIOSH). Recommended standard maximum permissible concentration=0.05 mg/M<sup>3</sup> (respirable free silica) as determined by a full-shift sample up to 10-hour working day, 40-hour work week. See NIOSH Criteria for a Recommended Standard Occupational Exposure to Crystalline Silica.

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### SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

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**Appearance:** Gray to gray-brown colored powder. Some products available in white and other colors.  
**Specific Gravity:** 2.6 to 3.15    **Melting Point:** >2700°F    **Boiling Point:** >2700°F  
**Vapor Pressure:** None    **Vapor Density:** None    **Evaporation Rate:** None  
**Solubility in Water:** Slight    **Odor:** None



Product Types: QUIKRETE® DRY PACKAGED PORTLAND CEMENT BASED PRODUCTS (SERIES 5)

MSDS K

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**SECTION IV - FIRE AND EXPLOSION HAZARD DATA**


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**Flammability:** Noncombustible and not explosive.

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**SECTION V - REACTIVITY DATA**


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**Stability:** Stable.**Incompatibility (Materials to Avoid):** Material when mixed with water will react with Aluminum and other alkali and alkaline earth elements liberating hydrogen gas.**Hazardous Decomposition or By-products:** None**Hazardous Polymerization:** Will Not Occur.**Condition to Avoid:** Keep dry until used to preserve product utility.

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**SECTION VI - HEALTH HAZARD DATA**


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**Route(s) of Entry:** Inhalation, Skin, Ingestion**Acute Exposure:** Product becomes alkaline when exposed to moisture. Exposure can dry the skin, cause alkali burns and effect the mucous membranes. Dust can irritate the eyes and upper respiratory system. Toxic effects noted in animals include, for acute exposures, alveolar damage with pulmonary edema.**Chronic Exposure:** Dust can cause inflammation of the lining tissue of the interior of the nose and inflammation of the cornea. Hypersensitive individuals may develop an allergic dermatitis.**Carcinogenicity:** Since portland cement and blended cements are manufactured from raw materials mined from the earth (limestone, marl, sand, shale, etc.) and process heat is provided by burning fossil fuels, trace, but detectable, amounts of naturally occurring, and possibly harmful, elements may be found during chemical analysis. Under ASTM standards, portland cement may contain 0.75 % insoluble residue. A fraction of these residues may be free crystalline silica. Respirable crystalline silica (quartz) can cause silicosis, a fibrosis (scarring) of the lungs and possibly cancer. There is evidence that exposure to respirable silica or the disease silicosis is associated with an increased incidence of Scleroderma, tuberculosis and kidney disorders.**Carcinogenicity Listings:**

NTP:	Known carcinogen
OSHA:	Not listed as a carcinogen
IARC Monographs:	Group 1 Carcinogen
California Proposition 65:	Known carcinogen

**NTP:** The National Toxicology Program, in its "Ninth Report on Carcinogens" (released May 15, 2000) concluded that "Respirable crystalline silica (RCS), primarily quartz dusts occurring in industrial and occupational settings, is *known to be a human carcinogen*, based on sufficient evidence of carcinogenicity from studies in humans indicating a causal relationship between exposure to RCS and increased lung cancer rates in workers exposed to crystalline silica dust (reviewed in IAC, 1997; Brown *et al.*, 1997; Hind *et al.*, 1997)

**IARC:** The International Agency for Research on Cancer ("IARC") concluded that there was "*sufficient evidence* in humans for the carcinogenicity of crystalline silica in the forms of quartz or cristobalite from occupational sources", and that there is "*sufficient evidence* in experimental animals for the carcinogenicity of quartz or cristobalite." The overall IARC evaluation was that "crystalline silica inhaled in the form of quartz or cristobalite from occupational sources is *carcinogenic to humans* (Group 1)." The IARC evaluation noted that "carcinogenicity was not detected in all industrial circumstances or studies. Carcinogenicity may be dependent on inherent characteristics of the crystalline silica or on external factors affecting its biological activity or distribution of its polymorphs." For further information on the IARC evaluation, see IARC Monographs on the Evaluation of carcinogenic Risks to Humans, Volume 68, "Silica, Some Silicates." (1997)

Product Types: QUIKRETE® DRY PACKAGED PORTLAND CEMENT BASED PRODUCTS (SERIES 5)

MSDS K

**Signs and Symptoms of Exposure:** Symptoms of excessive exposure to the dust include shortness of breath and reduced pulmonary function. Excessive exposure to skin and eyes especially when mixed with water can cause caustic burns as severe as third degree.

**Medical Conditions Generally Aggravated by Exposure:** Individuals with sensitive skin and with pulmonary and/or respiratory disease, including, but not limited to, asthma and bronchitis, or subject to eye irritation, should be precluded from exposure. Exposure to crystalline silica or the disease silicosis is associated with increased incidence of scleroderma, Tuberculosis and possibly increased incidence of kidney lesions.

**Chronic Exposure:** Dust can cause inflammation of the lining tissue of the interior of the nose and inflammation of the cornea. Hypersensitive individuals may develop an allergic dermatitis. (May contain trace (<0.05 %) amounts of chromium salts or compounds including hexavalent chromium, or other metals found to be hazardous or toxic in some chemical forms. These metals are mostly present as trace substitutions within the principal minerals)

**Medical Conditions Generally Aggravated by Exposure:** Individuals with sensitive skin and with pulmonary and/or respiratory disease, including, but not limited to, asthma and bronchitis, or subject to eye irritation, should be precluded from exposure.

**Emergency First Aid Procedures:**

**Eyes:** Immediately flush eye thoroughly with water. Continue flushing eye for at least 15 minutes, including under lids, to remove all particles. Call physician immediately.

**Skin:** Wash skin with cool water and pH-neutral soap or a mild detergent. Seek medical treatment if irritation or inflammation develops or persists. Seek immediate medical treatment in the event of burns.

**Inhalation:** Remove person to fresh air. If breathing is difficult, administer oxygen. If not breathing, give artificial respiration. Seek medical help if coughing and other symptoms do not subside. Inhalation of large amounts of portland cement require immediate medical attention.

**Ingestion:** Do not induce vomiting. If conscious, have the victim drink plenty of water and call a physician immediately.

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## SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE

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If spilled, use dustless methods (vacuum) and place into covered container for disposal or use if not contaminated or wet. Use adequate ventilation.

**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 RCRA or CERCLA.

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## SECTION VIII - CONTROL MEASURES

---

**DO NOT BREATHE DUST.** In dusty environments, the use of an OSHA, MSHA or NIOSH approved respirator and tight fitting goggles is recommended. Local exhaust can be used, if necessary, to control airborne dust levels.

The use of barrier creams or impervious gloves, boots and clothing to protect the skin from contact is recommended. Following work, workers should shower with soap and water. Precautions must be observed because burns occur with little warning -- little heat is sensed.

**WARN EMPLOYEES AND/OR CUSTOMERS OF THE HAZARDS AND REQUIRED OSHA PRECAUTIONS ASSOCIATED WITH THE USE OF THIS PRODUCT.**

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**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.



# Material Safety Data Sheet [OSHA 29 CFR 1910.1200]

The QUIKRETE® Companies  
One Securities Centre  
3490 Piedmont Road, Suite 1300  
Atlanta, GA 30329

Emergency Telephone Number  
(770) 216-9580

Information Telephone Number  
(770) 216-9580

Revision: July 2003

MSDS L

## SECTION I: PRODUCT IDENTIFICATION

Product Types: QUIKRETE® DRY PACKAGED GYPSUM CEMENT BASED PRODUCTS

<b>QUIKRETE® Product Name</b>	<b>Code #</b>
VENEER PLASTER, SAND WHITE	1801-04
VENEER PLASTER SMOOTH (1)	1801-00
PATCHING PLASTER	9903 (1)
FAST SET UNDERLAYMENT	1248-25
(UNSANDED) (1)	1248-24, 26

(1) Although these products contain no intentionally added Silica, they may contain small amounts of silica occurring as natural impurities in other raw materials or from low levels of contamination occurring during the manufacturing process.

## SECTION II - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

Hazardous Components	CAS No.	PEL (OSHA) mg/M <sup>3</sup>	TLV (ACGIH) mg/M <sup>3</sup>
Plaster of Paris	26499-65-0	10	10
Lime	01305-62-0 or 39445-23-3	5	5
May Contain:			
Pulverized Limestone	01317-65-3	5	5
Silica Sand, crystalline	14808-60-7	<u>10</u> %SiO <sub>2</sub> +2	0.05 (respirable)

**Other Limits:** National Institute for Occupational Safety and Health (NIOSH). Recommended standard maximum permissible concentration=0.05 mg/M<sup>3</sup> (respirable free silica) as determined by a full-shift sample up to 10-hour working day, 40-hour work week. See NIOSH Criteria for a Recommended Standard Occupational Exposure to Crystalline Silica.

## SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

<b>Appearance:</b>	White to off white powder.		
<b>Specific Gravity:</b>	2.6 to 3.15	<b>Melting Point:</b>	>2700 °F
<b>Vapor Pressure:</b>	None	<b>Vapor Density:</b>	None
<b>Solubility in Water:</b>	Slight	<b>Odor:</b>	None
		<b>Boiling Point:</b>	>2700 °F
		<b>Evaporation Rate:</b>	None



Product Types: QUIKRETE® DRY PACKAGED GYPSUM CEMENT BASED PRODUCTS

MSDS L

**SECTION IV - FIRE AND EXPLOSION HAZARD DATA****Flammability:** Noncombustible and not explosive.**SECTION V - REACTIVITY DATA****Stability:** Stable.**Incompatibility (Materials to Avoid):** Contact of silica with powerful oxidizing agents such as fluorine, chlorine trifluoride, manganese trioxide, oxygen difluoride, may cause fires.**Hazardous Decomposition or By-products:** Silica will dissolve in Hydrofluoric Acid and produce a corrosive gas - silicon tetrafluoride.**Hazardous Polymerization:** Will Not Occur.**Condition to Avoid:** Keep dry until used to preserve product utility.**SECTION VI - HEALTH HAZARD DATA****Route(s) of Entry:** Inhalation, Skin, Ingestion.**Acute Exposure:** Product becomes alkaline when exposed to moisture. Exposure can dry the skin, cause alkali burns and effect the mucous membranes. Dust can irritate the eyes and upper respiratory system. Toxic effects noted in animals include, for acute exposures, alveolar damage with pulmonary edema.**Chronic Exposure:** Dust can cause inflammation of the lining tissue of the interior of the nose and inflammation of the cornea. Hypersensitive individuals may develop an allergic dermatitis. Respirable crystalline silica (quartz) can cause silicosis, a fibrosis (scarring) of the lungs and possibly cancer. There is evidence that exposure to respirable silica or the disease silicosis is associated with an increased incidence of Scleroderma, tuberculosis and kidney disorders.**Carcinogenicity Listings:**

NTP:	Known carcinogen
OSHA:	Not listed as a carcinogen
IARC Monographs:	Group 1 Carcinogen
California Proposition 65:	Known carcinogen

**NTP:** The National Toxicology Program, in its "Ninth Report on Carcinogens" (released May 15, 2000) concluded that "Respirable crystalline silica (RCS), primarily quartz dusts occurring in industrial and occupational settings, is *known to be a human carcinogen*, based on sufficient evidence of carcinogenicity from studies in humans indicating a causal relationship between exposure to RCS and increased lung cancer rates in workers exposed to crystalline silica dust (reviewed in IAC, 1997; Brown *et al.*, 1997; Hind *et al.*, 1997)

**IARC:** The International Agency for Research on Cancer ("IARC") concluded that there was "*sufficient evidence* in humans for the carcinogenicity of crystalline silica in the forms of quartz or cristobalite from occupational sources", and that there is "*sufficient evidence* in experimental animals for the carcinogenicity of quartz or cristobalite." The overall IARC evaluation was that "crystalline silica inhaled in the form of quartz or cristobalite from occupational sources is *carcinogenic to humans* (Group 1)." The IARC evaluation noted that "carcinogenicity was not detected in all industrial circumstances or studies. Carcinogenicity may be dependent on inherent characteristics of the crystalline silica or on external factors affecting its biological activity or distribution of its polymorphs." For further information on the IARC evaluation, see IARC Monographs on the Evaluation of carcinogenic Risks to Humans, Volume 68, "Silica, Some Silicates..." (1997)

Product Types: QUIKRETE® DRY PACKAGED GYPSUM CEMENT BASED PRODUCTS

MSDS L

**Signs and Symptoms of Exposure:** Symptoms of excessive exposure to the dust include shortness of breath and reduced pulmonary function. Excessive exposure to skin and eyes especially when mixed with water can cause caustic burns as severe as third degree. **Medical Conditions Generally Aggravated by Exposure:** Individuals with sensitive skin and with pulmonary and/or respiratory disease, including, but not limited to, asthma and bronchitis, or subject to eye irritation, should be precluded from exposure.

**Emergency First Aid Procedures:** Irrigate (flood) eyes immediately and repeatedly with clean water. Wash exposed skin areas with soap and water. If irritation or inflammation occurs seek prompt medical attention. For gross inhalation, remove person immediately to fresh air, give artificial respiration as needed. Get prompt medical attention.

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## SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE

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**Spills:** If spilled, use dustless methods (vacuum) and place into covered container for disposal or use if not contaminated or wet. Use adequate ventilation.

**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 RCRA or CERCLA.

---

## SECTION VIII - CONTROL MEASURES

---

**Inhalation:** DO NOT BREATHE DUST. In dusty environments, the use of an OSHA, MSHA or NIOSH approved respirator is recommended. Local exhaust can be used, if necessary, to control airborne dust levels.

**Eyes:** Wear tight fitting goggles.

**Skin:** The use of barrier creams or impervious gloves, boots and clothing to protect the skin from contact is recommended. Following work, workers should shower with soap and water. Precautions must be observed because burns occur with little warning -- little heat is sensed.

WARN EMPLOYEES AND/OR CUSTOMERS OF THE HAZARDS AND REQUIRED OSHA PRECAUTIONS ASSOCIATED WITH THE USE OF THIS PRODUCT.

---

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Revision: July 2003

MSDS LL

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## SECTION I: PRODUCT IDENTIFICATION

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<u>QUIKRETE® Product Name</u>	<u>Code #</u>	<u>QUIKRETE® Product Name</u>	<u>Code #</u>
CEMENT COLOR (LIQUID)	1317	LIQUID STUCCO COLORS	1323
MORTAR AND STUCCO COLOR	1319	LIQUID STUCCO CONCENTRATE	5839

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## SECTION II - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

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Hazardous Components	CAS No.	PEL (OSHA) mg/M <sup>3</sup>	TLV (ACGIH) mg/M <sup>3</sup>
Iron Oxide Pigments (1)	01309-37-1	5	5

(1) Exposure limit as a nuisance dust. A dust hazard is not expected during normal usage of this product.

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## SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

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<b>Appearance:</b>	Liquid
<b>Color:</b>	Buff, Tan, Yellow, Brown, Black, Red
<b>Odor:</b>	None
<b>Melt Point/Freeze Point:</b>	28°F
<b>Boiling Point:</b>	160-200°F
<b>Vapor Pressure:</b>	Not Known
<b>Specific Gravity:</b>	1.7-1.9
<b>Bulk Density:</b>	14-16 lb./gallon
<b>Solubility in Water:</b>	Very slightly
<b>% Volatile by Volume:</b>	Not Known

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## SECTION IV - FIRE AND EXPLOSION HAZARD DATA

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<b>Flash Point F( C):</b>	Not applicable
<b>Flammable Limits:</b>	
<b>LEL:</b>	Not applicable
<b>UEL:</b>	Not applicable
<b>Extinguishing Media:</b>	Not flammable
<b>Special Fire Fighting Procedures:</b>	None
<b>Unusual Fire &amp; Explosive Hazards:</b>	None



Product Types: QUIKRETE® Liquid Cement Colors

MSDS LL

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**SECTION V - REACTIVITY DATA**

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<b>Stability:</b>	Stable
<b>Incompatibility:</b>	None
<b>Hazardous Decomposition or By-Products:</b>	None
<b>Hazardous Polymerization:</b>	Will not occur

---

**SECTION VI - HEALTH HAZARD DATA**

---

<b>Primary Route(s) of Exposure:</b>	Eye and skin contact, inhalation, ingestion
<b>Human Effects &amp; Symptoms of Overexposure:</b>	
<b>Acute:</b>	None Known
<b>Chronic:</b>	None Known
<b>Medical Conditions Aggravated by Exposure:</b>	None Known
<b>Carcinogenicity:</b>	None Known

**Emergency & First Aid Procedures:**

Eye Contact:	Flush eyes with plenty of water, lifting lids periodically for at least 15 minutes. Consult a physician if irritation persists.
Skin Contact:	Wash with soap and water
Inhalation:	Remove from dusty area to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen. Call a physician.
Ingestion:	Immediately contact a physician.

---

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

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**Steps to be Taken in Case Material is Released or Spilled:** Common housekeeping, vacuum or scoop material into a container for reclamation or disposal.

**Waste Disposal Method:** Material which cannot be reclaimed should be dried and land filled in accordance with local, state and federal regulations.

**Precautions to be Taken in Handling and Storage:** Store above freezing. Material should be kept in an airtight water-proof container. Avoid contact with eyes and skin. Wash thoroughly after handling.

**Other Precautions:** Keep containers sealed to keep the product from drying out.

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**VIII - CONTROL MEASURES**

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Respiratory Protection:	Not required
Ventilation:	Not required
Protective Gloves:	Rubber gloves
Protective Glasses:	Safety glasses or goggles
Work/Hygiene Practices:	Wash thoroughly after handling and before eating.

---

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Revision: July 2003

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## SECTION I: PRODUCT IDENTIFICATION

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<b>QUIKRETE® Product Name</b>	<b>Code #</b>
TRAFFIC TOP DRIVEWAY SEALER	8803

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## SECTION II - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

---

Components	CAS No.	ACGIH TLV	Approximate Wt. % Concentration
Refined Coal Tar Pitch	65996-93-2	0.2 mg/m <sup>3</sup> (1)	less than 25%
Water	7732-18-5	not hazardous	greater than 62%
Hydrous Aluminum Silicate	1332-58-7	10 mg/m <sup>3</sup> (2)	less than 12%
Additives	Proprietary	N/A	less than 1%

(1) Coal Tar Pitch volatiles (Benzene soluble fraction) see Section VI

(2) As respirable dust. Hazardous dust is not expected during normal use of this product.

**Hazardous Materials Identification System: (HMIS RATING)** Health - 3 Flammability -1 Reactivity - 0

Hazard Ranking: 0 - Least 1 - Slight 2 - Moderate 3 - High 4 - Extreme

---

## SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

---

The following are approximate or typical values and should not be used for precise design purposes.

**Boiling Range:** 212°F IBP (ASTM D 86)      **Vapor Pressure:** Approximately 0 Hg @ 100°F - estimated

**Specific Gravity:** Greater than 1.00      **Vapor Density:** Greater than 1.0 (air = 1.0)

**Percent Volatile by Volume:** Greater than 50      **pH:** 7.0 - 8.0

**Molecular Weight:** N/A (complex mixture of hydrocarbons solvents and fillers)

**Solubility in Water @ 1 ATM and 77 °F:** partially miscible

**Viscosity:** Approximately 4,000 cps @ 77° F when completely stirred.

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## SECTION IV - FIRE AND EXPLOSION HAZARD DATA

---

**Flash Point:** (Minimum) 212 F TCC (Coal Tar Pitch) ASTM D 3143

**Auto-ignition Temperature:** Not established

**National Fire Protection Association (NFPA) - Hazard Identification:** Health- 3 Flammability- 1 Reactivity- 0

**Handling Precautions:** Keep containers tightly closed. Keep containers cool and dry. Store in properly ventilated area. Keep away from sources of heat and flame.

**Flammable or Explosive Limits:** (Approximate percent by volume in air) Lower (LEL):N/A Upper (UEL): N/A

**Extinguishing Media and Fire Fighting Procedures:** Extinguish with dry chemical, CO<sub>2</sub>, or sand.

Universal type foam and water fog are effective. Water may be used to keep fire exposed containers cool. FIREMAN



Product: TRAFFIC TOP DRIVEWAY SEALER

MSDS M

should wear self-contained breathing apparatus and full protective clothing should be worn when fumes and/or smoke are present. A complete soap and water shower should be taken. Scott Air Pack should be available.

**Decomposition Products Under Fire Conditions:** Pyrolysis products of aromatic hydrocarbons.

**“Empty” Container Warning:** Dispose of in an environmentally safe manner and in accordance with governmental regulations. “Empty” containers retain residue (liquid and/or vapor) and can be dangerous. DO NOT PRESSURIZE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, OR OTHER SOURCES OF IGNITION. THEY MAY EXPLODE AND CAUSE INJURY OR DEATH. Do not attempt to clean since residue is difficult to remove. For work on tanks, refer to OSHA regulation ANSI Z49.1 and other governmental and industrial references pertaining to cleaning, repairing, welding or other contemplated operations.

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## SECTION V - REACTIVITY DATA

---

**Stability:** Stable

**Hazardous Polymerization:** Will not occur

**Hazardous Decomposition Products:** Decomposition is not expected from normal handling. Combustion products can include oxides of nitrogen, carbon, and possibly sulfur.

**Incompatibility (Material to Avoid):** None known.

**Conditions to Avoid:** None known.

---

## SECTION VI - HEALTH HAZARD DATA

---

**Variability Among Individuals:** Health studies have shown that individual sensitivities vary from person to person. As a precaution, exposure to vapors, liquids, mists, or fumes should be minimized. Some individuals are more susceptible than others to skin disorders. Fair-haired, light complexioned persons are more apt to be affected than dark-haired, dark skinned people.

**Effects of Overexposure:** (Signs and symptoms of exposure) Chronic overexposure (as defined by OSHA standards) may cause cancer. Harmful if inhaled or swallowed. Causes eye and skin irritation.

**Nature of Hazard and Toxicity Information:** Liquid can cause skin irritation and dermatitis, including acne. Coal tar is a photo toxic substance which, in the presence of ultraviolet light (sunlight), can cause a skin reaction similar to an exaggerated sunburn, frequently causing blisters. Ingestion can cause severe gastrointestinal irritation, nausea, and vomiting if swallowed; fatal in dose of about 0.1 g/kg of body weight.

Long term exposure to coal tar over many years in the absence of recommended hygiene practices can cause changes in skin pigmentation, benign skin growths, or skin cancer. Additionally, inhalation of vapors over a period of several years may present a lung cancer hazard.

**Pre-existing Medical Conditions Which May be Aggravated by Exposure:** Persons with history of diseases in the liver, skin, eye, respiratory system, blood forming organs or with bleeding abnormalities or exposure to material harmful to these systems are at greater risk than normal risk of developing adverse health effects when working with this product.

**Eye Contact:** Coal Tar - Vapors and mist may cause irritation to the eyes. Eye contact with product will result in irritation, which in the absence of recommended first aid, can result in minor burns to eyes. If eye contact occurs, flush with water or mineral oil for at least 15 minutes and SEEK MEDICAL ATTENTION. Inorganic particulates; quartz, etc., may cause mechanical irritation.

**Skin:** Coal Tar - Exposure causes skin irritation characterized by skin itching, burning, swelling, and redness. Photosensitization of the skin may occur. This irritation has a burning sensation somewhat like sunburn and is accentuated by sunlight. Repeated or prolonged contact may contribute to conditions such as dermatitis, tar warts, and rough skin. If contact occurs, wash affected area with waterless hand cleaner. Remove contaminated clothing/shoes and do not reuse until thoroughly laundered. If irritation persists, SEEK MEDICAL ATTENTION.

Product: TRAFFIC TOP DRIVEWAY SEALER

MSDS M

**Inhalation:** Coal Tar - Acute effects caused from overexposure may include coughing, sneezing, and swollen or irritated nasal mucosa and sinuses. Repeated and/or prolonged contact to high concentrations may result in toxic effects, such as respiratory difficulties, convulsions, and possible cardiovascular collapse may occur. If inhaled, remove to fresh air. If not breathing, give artificial respiration or oxygen as needed. SEEK MEDICAL ATTENTION.

**Ingestion:** Coal Tar - May cause gastrointestinal tract irritation followed by nausea and vomiting, abdominal discomfort, rapid pulse, etc. In extreme cases, cardiovascular collapse may occur. If ingested, DO NOT INDUCE VOMITING. Give water or clear liquids. Consult local Poison Control Center, IMMEDIATELY!

---

## SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE

---

**Ventilation:** Ventilation should be adequate. Maintain vapor and particulate levels below the applicable exposure limits for coal tar pitch volatiles. See Section II, Refined Coal Tar Pitch.

**Respiratory Protection:** Use NIOSH/MSHA approved respirator when TLV is exceeded.

**Protective Gloves:** Use chemical resistant gloves, if needed, to avoid prolonged or repeated skin cancer.

**Eye Protection:** Wear chemical splash goggles (ANSI Z 87.1) or safety glasses when working, pouring or transferring this material. DO NOT WEAR CONTACT LENSES IN THE PRESENCE OF THIS MATERIAL UNLESS SPLASH GOGGLES ARE WORN.

**Other Protective Equipment:** Use chemical resistant apron or other impervious clothing, if needed, to avoid contaminating regular clothing which could result in prolonged or repeated skin contact. Wear clothing closed at the neck, long sleeved shirt, pants and impermeable shoes. Contaminated gloves, clothing, etc. should be removed immediately and cleaned. Irritation of the skin and sunburn reactions in handling coal tar products can usually be alleviated or prevented by the use of protective creams and sunscreen agents. Protective or 'barrier creams' form a film that acts both as a chemical and physical 'barrier' between the skin and the contaminant and tends to resist penetration of the contaminant into the pores of the skin. In applying 'barrier' creams, be sure the skin is clean and dry. Sunscreen agents filter out most of the ultra-violet rays from the sun. A suggested application is to use a high protection sunscreen (sun protection factor 15 or greater) such as Coppertone Super Shade Lotion applied to clean skin and allowed to dry (5 minutes). This sunscreen blocks out most ultra-violet lengths of the sun's rays. Ultra-violet rays are emitted throughout the day and evening, regardless of cloud cover. Next, a protective barrier cream such as Ply-9, which is solvent resistant and water soluble (for easier clean-up) should be applied. This cream will occlude the skin pores and form a 'barrier' so that the chemicals cannot penetrate. Creams that are not solvent resistant such as Jergins SBS44, West Chemical's 411, or MSA's FEND should be avoided. Repeat applications each time after washing or after rough work which would remove the protective film by abrasion. To remove, wash skin with warm water and mild soap. One of the advantages of the protective creams is that it makes it easier to clean tars, oils, etc. of the skin.

**Work Practices/Engineering Controls:** Keep containers closed when not in use. DO NOT STORE NEAR HEAT, SPARKS, FLAME OR STRONG OXIDANTS.

**Personal Hygiene:** Minimize breathing vapor or mist. Avoid prolonged or repeated contact with skin. Remove contaminated clothing; launder or dry clean before reuse. Remove contaminated shoes and thoroughly clean and dry before reuse. Cleanse skin thoroughly after contact, before breaks and meals, and at end of work period. Product is readily removed from skin by waterless hand cleaners followed by washing thoroughly with soap and water.

---

## SECTION VIII - CONTROL MEASURES

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### Steps to be taken if spilled or released:

- Keep people away.
- Recover free product; add sand, earth, or other suitable absorbents.
- Avoid breathing vapors and contact with skin and eyes.

Product: TRAFFIC TOP DRIVEWAY SEALER

MSDS M

- Ventilate confined spaces; open all windows and doors.
- Keep product out of sewers and water courses by diking or impounding
- Advise authorities if product has entered or may enter sewers, water courses or extensive land areas.

ASSURE CONFORMITY WITH APPLICABLE GOVERNMENTAL REGULATIONS.

**Reportable Quantity (RQ), EPA Regulation 40 CFR 306: (CERCLA 302 and 304):** None above reportable quantities.

**Extremely Hazardous Substance(s) Threshold Planning Quantity (TPQ), EPA Regulation 40 CFR 355: (SARA Section 302-304):** None above reportable quantities.

**Toxic Chemical Release Reporting, EPA Regulation 40 CFR 372: (SARA Section 313):** None above reportable quantities.

**EPA Hazard Classification Code: (SARA Sections 311 and 312):**

Acute	Chronic	Fire	Pressure	Reactive	Not
<u>Hazard</u>	<u>Hazard</u>	<u>Hazard</u>	<u>Hazard</u>	<u>Hazard</u>	<u>Applicable</u>
XXX	XXX				

**IX. TRANSPORTATION AND OSHA LABEL INFORMATION**

**Transportation Incident Information:** For further information relative to spills resulting from transportation incidents, refer to latest Department of Transportation Guidebook for Hazardous Materials Incidents, DOT P 5800.3.

**DOT Identification Number:** Exempt from DOT HM-181 regulation.

**OSHA REQUIRED LABEL INFORMATION:** In compliance with hazard and right-to-know requirements, the following OSHA Hazard Warnings should be found on a label, bill of lading or invoice accompanying this product.

**WARNING! CONTAINS COAL TAR PITCH.** Note: product label will contain additional non-OSHA information.

**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. The Environmental Information included under Section VIII hereof as well as the Hazardous Material Identification System (HMIS) and National Fire Protection Association (NFPA) ratings have been included by The QUIKRETE® Companies in order to provide additional health and hazard classification information. The ratings recommended are based upon the criteria supplied by the developers of these rating systems, together with The QUIKRETE® Companies interpretation of the available data.



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Revision: July 2003

MSDS N

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## SECTION I: PRODUCT IDENTIFICATION

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<u>QUIKRETE® Product Name</u>	<u>Code #</u>
THERMO-LUBE	1905

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## SECTION II - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

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<u>Hazardous Components</u>	<u>CAS No.</u>	<u>PEL (OSHA)</u> mg/M <sup>3</sup>	<u>TLV (ACGIH)</u> mg/M <sup>3</sup>
Calcium Chloride	10043-52-4	---	---

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## SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

---

<b>Solubility in Water:</b>	Dilutable
<b>Physical appearance and odor:</b>	Blue liquid, odorless
<b>Melting or freezing point:</b>	0°C/32°F water; Boiling Point: 100°C/212°F

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## SECTION IV - FIRE AND EXPLOSION HAZARD DATA

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**Flammability:** Noncombustible and not explosive.

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## SECTION V - REACTIVITY DATA

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**Stability:** Stable. Is not incompatible with other minerals, will not decompose into hazardous by-products and will not polymerize.

### SECTION VI - HEALTH HAZARD DATA

May irritate or burn eyes. May cause skin irritation.

**Emergency First Aid Procedures:** Irrigate (flood) eyes immediately for 15 minutes. Wash exposed skin areas with soap and water. If swallowed, induce vomiting immediately by giving two glasses of water and sticking finger down throat. Call physician.

---

## SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE

---

Use waterproof gloves, and wear safety glasses with side shields.



Product: THERMO LUBE

MSDS N

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**SECTION VIII - CONTROL MEASURES**

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If spilled soak up with absorbent material, flush remainder with water. Flush to sewer if permitted by applicable local, state and federal regulations. Store in a cool place, avoid freezing.

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## SECTION I: PRODUCT IDENTIFICATION

### QUIKRETE® Product Name

TRAFFIC TOP DRIVEWAY SEALER & FILLER

### Code #

8804

## SECTION II - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

Components	CAS No.	ACGIH TLV	Approximate Wt. % Concentration
Refined Coal Tar Pitch	65996-93-2	0.2 mg/m <sup>3</sup> (1)	less than 25%
Water	7732-18-5	not hazardous	greater than 38%
Quartz (respirable)	14908-60-7	0.05 mg/m <sup>3</sup> (2)	less than 25%
Hydrous Aluminum Silicate	1332-58-7	10 mg/m <sup>3</sup> (2)	less than 12%

(1) Coal Tar Pitch volatiles (Benzene soluble fraction) see Section VI

(2) As respirable dust. Hazardous dust is not expected during normal use of this product.

**Hazardous Materials Identification System: (HMIS RATING)** Health - 3 Flammability -1 Reactivity - 0

Hazard Ranking: 0 - Least 1 - Slight 2 - Moderate 3 - High 4 - Extreme

## SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

The following are approximate or typical values and should not be used for precise design purposes.

**Boiling Range:** 212°F IBP (ASTM D 86) **Vapor Pressure:** Approximately 0 Hg @ 70°F - estimated

**Specific Gravity:** Greater than 1.00 **Vapor Density:** Greater than 1.0 (air = 1.0)

**Percent Volatile by Volume:** Less than 50 **pH:** 7.0 - 8.0

**Molecular Weight:** N/A (complex mixture of hydrocarbons solvents and fillers)

**Solubility in Water @ 1 ATM and 77°F:** partially miscible

**Viscosity:** Approximately 5,000 cps @ 77°F when completely stirred

## SECTION IV - FIRE AND EXPLOSION HAZARD DATA

**Flash Point:** (Minimum) 212°F TCC (Coal Tar Pitch) ASTM D 3143

**Auto-ignition Temperature:** Not established

**National Fire Protection Association (NFPA) - Hazard Identification:** Health- 3 Flammability- 1 Reactivity- 0

**Handling Precautions:** Keep containers tightly closed. Keep containers cool and dry. Store in properly ventilated area. Keep away from sources of heat and flame.

**Flammable or Explosive Limits:** (Approximate percent by volume in air) Lower (LEL) N/A Upper (UEL): N/A

**Extinguishing Media and Fire Fighting Procedures:** Extinguish with dry chemical, CO<sub>2</sub>, or sand.

Universal type foam and water fog are effective. Water may be used to keep fire exposed containers cool. FIREMAN



Product: TRAFFIC TOP DRIVEWAY SEALER &amp; FILLER

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should wear self-contained breathing apparatus and full protective clothing should be worn when fumes and/or smoke are present. A complete soap and water shower should be taken. Scott Air Pack should be available.

**Decomposition Products Under Fire Conditions:** Pyrolysis products of aromatic hydrocarbons.

**“Empty” Container Warning:** Dispose of in an environmentally safe manner and in accordance with governmental regulations. “Empty” containers retain residue (liquid and/or vapor) and can be dangerous. DO NOT PRESSURIZE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, OR OTHER SOURCES OF IGNITION. THEY MAY EXPLODE AND CAUSE INJURY OR DEATH. Do not attempt to clean since residue is difficult to remove. For work on tanks, refer to OSHA regulation ANSI Z49.1 and other governmental and industrial references pertaining to cleaning, repairing, welding or other contemplated operations.

### SECTION V - REACTIVITY DATA

**Stability:** Stable

**Hazardous Polymerization:** Will not occur

**Hazardous Decomposition Products:** Decomposition is not expected from normal handling. Combustion products can include oxides of nitrogen, carbon, and possibly sulfur.

**Incompatibility (Material to Avoid):** None known.

**Conditions to Avoid:** None known.

### SECTION VI - HEALTH HAZARD DATA

**Variable Among Individuals:** Health studies have shown that individual sensitivities vary from person to person. As a precaution, exposure to vapors, liquids, mists, or fumes should be minimized. Some individuals are more susceptible than others to skin disorders. Fair-haired, light complexioned persons are more apt to be affected than dark-haired, dark skinned people.

**Effects of Overexposure:** (Signs and symptoms of exposure) Chronic overexposure (as defined by OSHA standards) may cause cancer. Harmful if inhaled or swallowed. Causes eye and skin irritation.

**Nature of Hazard and Toxicity Information:** Liquid can cause skin irritation and dermatitis, including acne. Coal tar is a photo toxic substance which, in the presence of ultraviolet light (sunlight), can cause a skin reaction similar to an exaggerated sunburn, frequently causing blisters. Ingestion can cause severe gastrointestinal irritation, nausea, and vomiting if swallowed; fatal in dose of about 0.1 g/kg of body weight. Long term exposure to coal tar over many years in the absence of recommended hygiene practices can cause changes in skin pigmentation, benign skin growths, or skin cancer. Additionally, inhalation of vapors over a period of several years may present a lung cancer hazard.

Crystalline quartz contained in this product is totally encapsulated and does not present a respirable dust hazard. Crystalline quartz in respirable form may cause delayed (chronic) lung injury (silicosis). Silicosis is a form of disabling pulmonary fibrosis which can be progressive and may lead to death.

**Carcinogenicity:**

Coal tar, benzo(a)pyrene, and mineral oils containing polycyclic aromatic hydrocarbons have been determined by NTP and IARC to be human carcinogens. This product contains crystalline silica which is not expected to ever be in a respirable form while handling or using this product. However the user is advised of the following carcinogenicity listings for respirable crystalline silica:

<b>Carcinogenicity Listings for silica:</b>	NTP:	Known carcinogen
	OSHA:	Not listed as a carcinogen
	IARC Monographs:	Group 1 Carcinogen
	California Proposition 65:	Known carcinogen

NTP: The National Toxicology Program, in its “Ninth Report on Carcinogens” (released May 15, 2000) concluded that “Respirable crystalline silica (RCS), primarily quartz dusts occurring in industrial and occupational settings, is *known*

Product: TRAFFIC TOP DRIVEWAY SEALER &amp; FILLER

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to be a human carcinogen, based on sufficient evidence of carcinogenicity from studies in humans indicating a causal relationship between exposure to RCS and increased lung cancer rates in workers exposed to crystalline silica dust (reviewed in IAC, 1997; Brown *et al.*, 1997; Hind *et al.*, 1997)

IARC: The International Agency for Research on Cancer (“IARC”) concluded that there was “*sufficient evidence* in humans for the carcinogenicity of crystalline silica in the forms of quartz or cristobalite from occupational sources”, and that there is “*sufficient evidence* in experimental animals for the carcinogenicity of quartz or cristobalite.” The overall IARC evaluation was that “crystalline silica inhaled in the form of quartz or cristobalite from occupational sources is *carcinogenic to humans* (Group 1).” The IARC evaluation noted that “carcinogenicity was not detected in all industrial circumstances or studies. Carcinogenicity may be dependent on inherent characteristics of the crystalline silica or on external factors affecting its biological activity or distribution of its polymorphs.” For further information on the IARC evaluation, see IARC Monographs on the Evaluation of carcinogenic Risks to Humans, Volume 68, “Silica, Some Silicates...” (1997)

**Pre-existing Medical Conditions Which May be Aggravated by Exposure:** Persons with history of diseases in the liver, skin, eye, respiratory system, blood forming organs or with bleeding abnormalities or exposure to material harmful to these systems are at greater risk than normal risk of developing adverse health effects when working with this product.

**Eye Contact:** Coal Tar - Vapors and mist may cause irritation to the eyes. Eye contact with product will result in irritation, which in the absence of recommended first aid, can result in minor burns to eyes. If eye contact occurs, flush with water or mineral oil for at least 15 minutes and SEEK MEDICAL ATTENTION. Inorganic particulates; quartz, etc., may cause mechanical irritation.

**Skin:** Coal Tar - Exposure causes skin irritation characterized by skin itching, burning, swelling, and redness. Photosensitization of the skin may occur. This irritation has a burning sensation somewhat like sunburn and is accentuated by sunlight. Repeated or prolonged contact may contribute to conditions such as dermatitis, tar warts, and rough skin. If contact occurs, wash affected area with waterless hand cleaner. Remove contaminated clothing/shoes and do not reuse until thoroughly laundered. If irritation persists, SEEK MEDICAL ATTENTION.

**Inhalation:** Coal Tar - Acute effects caused from overexposure may include coughing, sneezing, and swollen or irritated nasal mucosa and sinuses. Repeated and/or prolonged contact to high concentrations may result in toxic effects, such as respiratory difficulties, convulsions, and possible cardiovascular collapse may occur. If inhaled, remove to fresh air. If not breathing, give artificial respiration or oxygen as needed. SEEK MEDICAL ATTENTION.

**Ingestion:** Coal Tar - May cause gastrointestinal tract irritation followed by nausea and vomiting, abdominal discomfort, rapid pulse, etc. In extreme cases, cardiovascular collapse may occur. If ingested, DO NOT INDUCE VOMITING. Give water or clear liquids. Consult local Poison Control Center, IMMEDIATELY!

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## SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE

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**Ventilation:** Ventilation should be adequate. Maintain vapor and particulate levels below the applicable exposure limits for coal tar pitch volatiles. See Section II, Refined Coal Tar Pitch.

**Respiratory Protection:** Use NIOSH/MSHA approved respirator when TLV is exceeded.

**Protective Gloves:** Use chemical resistant gloves, if needed, to avoid prolonged or repeated skin cancer.

**Eye Protection:** Wear chemical splash goggles (ANSI Z 87.1) or safety glasses when working, pouring or transferring this material. DO NOT WEAR CONTACT LENSES IN THE PRESENCE OF THIS MATERIAL UNLESS SPLASH GOGGLES ARE WORN.

**Other Protective Equipment:** Use chemical resistant apron or other impervious clothing, if needed, to avoid contaminating regular clothing which could result in prolonged or repeated skin contact. Wear clothing closed at the neck, long sleeved shirt, pants and impermeable shoes. Contaminated gloves, clothing, etc. should be removed immediately and cleaned.

Irritation of the skin and sunburn reactions in handling coal tar products can usually be alleviated or prevented by the use of protective creams and sunscreen agents. Protective or ‘barrier creams’ form a film that acts both as a chemical

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and physical 'barrier' between the skin and the contaminant and tends to resist penetration of the contaminant into the pores of the skin. In applying 'barrier' creams, be sure the skin is clean and dry. Sunscreen agents filter out most of the ultra-violet rays from the sun. A suggested application is to use a high protection sunscreen (sun protection factor 15 or greater) such as Coppertone Super Shade Lotion applied to clean skin and allowed to dry (5 minutes). This sunscreen blocks out most ultra-violet lengths of the sun's rays. Ultra-violet rays are emitted throughout the day and evening, regardless of cloud cover. Next, a protective barrier cream such as Ply-9, which is solvent resistant and water soluble (for easier clean-up) should be applied. This cream will occlude the skin pores and form a 'barrier' so that the chemicals cannot penetrate. Creams that are not solvent resistant such as Jergins SBS44, West Chemical's 411, or MSA's FEND should be avoided. Repeat applications each time after washing or after rough work which would remove the protective film by abrasion. To remove, wash skin with warm water and mild soap. One of the advantages of the protective creams is that it makes it easier to clean tars, oils, etc. of the skin.

**Work Practices/Engineering Controls:** Keep containers closed when not in use. DO NOT STORE NEAR HEAT, SPARKS, FLAME OR STRONG OXIDANTS.

**Personal Hygiene:** Minimize breathing vapor or mist. Avoid prolonged or repeated contact with skin. Remove contaminated clothing; launder or dry clean before reuse. Remove contaminated shoes and thoroughly clean and dry before reuse. Cleanse skin thoroughly after contact, before breaks and meals, and at end of work period. Product is readily removed from skin by waterless hand cleaners followed by washing thoroughly with soap and water.

### SECTION VIII - CONTROL MEASURES

#### Steps to be taken if spilled or released:

- Keep people away.
- Recover free product; add sand, earth, or other suitable absorbents.
- Avoid breathing vapors and contact with skin and eyes.
- Ventilate confined spaces; open all windows and doors.
- Keep product out of sewers and water courses by diking or impounding.
- Advise authorities if product has entered or may enter sewers, water courses or extensive land areas.
- ASSURE CONFORMITY WITH APPLICABLE GOVERNMENTAL REGULATIONS.

**Reportable Quantity (R.Q.), EPA Regulation 40 CFR 306: (CERCLA 302 and 304):** None above reportable quantities.

**Extremely Hazardous Substance(s) Threshold Planning Quantity (TPQ), EPA Regulation 40 CFR 355: (SARA Section 302-304):** None above reportable quantities.

**Toxic Chemical Release Reporting, EPA Regulation 40 CFR 372: (SARA Section 313):** None above reportable quantities.

#### EPA Hazard Classification Code: (SARA Sections 311 and 312):

Acute	Chronic	Fire	Pressure	Reactive	Not
Hazard	Hazard	Hazard	Hazard	Hazard	Applicable
XXX	XXX				

### IX. TRANSPORTATION AND OSHA LABEL INFORMATION

**Transportation Incident Information:** For further information relative to spills resulting from transportation incidents, refer to latest Department of Transportation Guidebook for Hazardous Materials Incidents, DOT P 5800.3.

**DOT Identification Number:** Exempt from DOT HM-181 regulation.

Product: TRAFFIC TOP DRIVEWAY SEALER &amp; FILLER

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**OSHA REQUIRED LABEL INFORMATION:** In compliance with hazard and right-to-know requirements, the following OSHA Hazard Warnings should be found on a label, bill of lading or invoice accompanying this product. **WARNING! CONTAINS COAL TAR PITCH.** Note: product label will contain additional non-OSHA information.

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**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.

The Environmental Information included under Section VIII hereof as well as the Hazardous Material Identification System (HMIS) and National Fire Protection Association (NFPA) ratings have been included by The QUIKRETE® Companies in order to provide additional health and hazard classification information. The ratings recommended are based upon the criteria supplied by the developers of these rating systems, together with The QUIKRETE® Companies interpretation of the available data.



# Material Safety Data Sheet [OSHA 29 CFR 1910.1200]

The QUIKRETE® Companies  
One Securities Centre  
3490 Piedmont Road, Suite 1300  
Atlanta, GA 30329

Emergency Telephone Number  
(770) 216-9580

Information Telephone Number  
(770) 216-9580

Revision: July 2003

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## SECTION I: PRODUCT IDENTIFICATION

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<u>QUIKRETE® Product Name</u>	<u>Code #</u>
QUIKWALL® ELASTOMERIC COATING	1315

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## SECTION II - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

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Hazardous Components	CAS No.	PEL (OSHA) mg/M <sup>3</sup>	TLV (ACGIH) mg/M <sup>3</sup>
Limestone/Marble	1317-65-3	5	5
Acrylic Polymer	Not Hazardous	None	None
Clay	12174-11-7	15	10
Titanium Dioxide	13463-67-7	15	10
Zinc Oxide, respirable dust	1314-13-2	5	5

Note: The hazard limits above are for air borne dust. Generation of hazardous dust is not expected to occur during normal usage of this product.

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## SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

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**Solubility in Water:** Dilutable.

**Physical Appearance and Odor:** White or tinted viscous liquid with a slight ether and ammonia odor.

**Boiling Point:** ~100°C (212°F)

**Freezing Point:** ~ -1°C (30°)

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## SECTION IV - FIRE AND EXPLOSION HAZARD DATA

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**Unusual Hazards:** This water based dispersion can splatter at temperatures above 100°C (212°F). Polymer film can burn once the water has evaporated. Product also may contain less than 1 % of a solvent with a Flash Point of 120°C (248°F)

**Extinguishing Agents:** Use methods appropriate for surrounding fire.

**Personal Protective Equipment:** For fire fighting, wear self-contained breathing apparatus and full protective gear.

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## SECTION V - REACTIVITY DATA

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**Stability:** This material is considered stable. However, avoid temperatures above 177°C/350°F, the onset of polymer decomposition. Thermal decomposition is dependent on time and temperature.

**Hazardous Decomposition Products:** Thermal decomposition may yield acrylic monomers.

**Hazardous Polymerization:** Will not occur.

**Incompatibility:** Avoid contact with strong oxidizing agents or strong alkalis.



QUIKRETE® MATERIAL SAFETY DATA SHEET

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Product: QUIKRETE® ELASTOMERIC COATING

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Product: QUIKRETE® ELASTOMERIC COATING

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**SECTION VI - HEALTH HAZARD DATA**

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<b>Route(s) of Entry:</b>	Inhalation?	Yes
	Skin?	Yes
	Ingestion?	Yes

**HEALTH EFFECTS FROM OVEREXPOSURE****Inhalation of vapor or mist can cause the following:** headache - nausea - irritation of nose, throat, and lungs**Eye Contact:** Direct contact with material can cause irritation and possible corneal injury.**Skin Contact:** Prolonged or repeated skin contact can cause slight irritation.**FIRST AID:****Skin:** Thoroughly wash affected area with soap and water. Remove contaminated clothing.**Eye Contact:** Flush with large amounts of water, lifting the upper and lower lids occasionally. Do not rub eyes. Product contains granular fillers, which can scratch the cornea. Get medical attention.**Ingestion:** If swallowed, give two glasses of water. If large amounts are ingested, induce vomiting with Ipecac syrup or by placing finger at the back of the throat. Never give anything by mouth to an unconscious person. Get medical attention.**Inhalation:** Remove to fresh air if effects occur. Consult physician.

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

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AVOID SKIN AND EYE CONTACT AND AVOID BREATHING VAPORS.

**Storage Conditions:** Keep from freezing; material may coagulate. The minimum recommended storage temperature for this material is 1C/34F. The maximum recommended storage temperature for this material is 49C/120F.**Personal Protective Equipment:****Eye protection:** Use chemical splash goggles (ANSI Z87.1 or approved equivalent)**Hand protection:** Neoprene gloves are recommended. Gloves of other chemically resistant materials may not provide adequate protection.

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**SECTION VIII - CONTROL MEASURES**

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**Spill and leak handling:**

Keep spectators away. Floor may be slippery; use care to avoid falling. Contain spills immediately with inert materials (e.g. sand, earth). Transfer liquids and solid diking material to separate suitable containers for recovery or disposal.

**CAUTION:** Keep spills and cleaning runoff out of municipal sewers and open bodies of water.

Personal Protection

**Ventilation:**Use local exhaust ventilation with a minimum capture velocity of 100 ft/min. (30 m/min.) at the point of vapor evolution. Refer to the current edition of Industrial Ventilation: A Manual of Recommended Practice published by the American Conference of Governmental Industrial Hygienists for information on the design, installation, use, and maintenance of exhaust systems.**Other Protective Equipment:** Facilities storing or utilizing this material should be equipped with an eyewash facility.**WASTE DISPOSAL**

Coagulate the emulsion by the stepwise addition of ferric chloride and lime. Remove the clear supernatant and flush to a chemical sewer. Incinerate liquid and contaminated solids in accordance with local, state, and federal regulations.



Product: QUIKRETE® ELASTOMERIC COATING

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**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.



# Material Safety Data Sheet

## [OSHA 29 CFR 1910.1200]

The QUIKRETE® Companies  
 One Securities Centre  
 3490 Piedmont Road, Suite 1300  
 Atlanta, GA 30329

Emergency Telephone Number  
 (770) 216-9580

Information Telephone Number  
 (770) 216-9580

Revision: July 2003

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### SECTION I: PRODUCT IDENTIFICATION

**QUIKRETE® Product Name**

COLOR-PAK

**Code #**

1318

(All Colors but Charcoal)

### SECTION II - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

<b>Hazardous Components</b>	<b>CAS No.</b>	<b>PEL (OSHA)</b>	<b>TLV (ACGIH)</b>
	<b>mg/M<sup>3</sup></b>	<b>mg/M<sup>3</sup></b>	
Silicon dioxide (amorphous)	7631-86-9	6	10
Iron Oxide Pigments	01309-37-1	5	5
Calcium Carbonate	1317-65-3	5	5
Contains one or more of the following ingredients in trace levels that are required to be reported under California proposition 65			
Lead	7439-92-1	<100 ppm	
Cadmium	7440-43-9	<5 ppm	
Arsenic	7440-38-2	<50 ppm	
Copper	7440-50-8	<800 ppm	
Manganese	7439-96-5	<200 ppm	
Mercury	7429-97-6	<1 ppm	
Nickel	7440-02-0	<400 ppm	
Aniline	62-53-3	<1 ppm	

### SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

<b>Appearance:</b>	solid, fine powder
<b>Color:</b>	available in several colors
<b>Odor:</b>	none
<b>Melt Point/Freeze Point:</b>	>1832° F (1,000° C)
<b>Boiling Point:</b>	not applicable
<b>Vapor Pressure:</b>	not applicable
<b>Specific Gravity:</b>	~4.4-4.6
<b>Bulk Density:</b>	500-1100 kg/m <sup>3</sup>
<b>Solubility in Water:</b>	insoluble
<b>% Volatile by Volume:</b>	not applicable



Product: QUIKRETE® COLOR PAK

MSDS Q

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**SECTION IV - FIRE AND EXPLOSION HAZARD DATA**

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<b>Flammable properties:</b>	Not flammable
<b>Flash Point F( C):</b>	Not applicable
<b>Flammable Limits:</b>	
<b>LEL:</b>	Not applicable
<b>UEL:</b>	Not applicable
<b>Extinguishing Media:</b>	Not combustible, use methods appropriate for combustible materials in the area
<b>Special Fire Fighting Procedures:</b>	None
<b>Unusual Fire &amp; Explosive Hazards:</b>	None
<b>Auto-ignition Temperature:</b>	Exposure to heat greater than 80 C can cause the portion of black iron oxide contained in this product to auto-oxidize which generates additional heat. Under certain conditions, this heat may be sufficient to cause the bag or combustible materials stored nearby to ignite.

---

**SECTION V - REACTIVITY DATA**

---

<b>Stability:</b> Stable to about 176°F (80°C).	Keep away from flames and heat.
<b>Incompatibility:</b>	None
<b>Hazardous Decomposition or By-Products:</b>	None
<b>Hazardous Polymerization:</b>	Will not occur

---

**SECTION VI - HEALTH HAZARD DATA**

---

<b>Primary Route(s) of Exposure:</b>	Eye and skin contact, inhalation, ingestion
<b>Human Effects &amp; Symptoms of Overexposure:</b>	
<b>Acute:</b>	None reported
<b>Chronic:</b>	Prolonged inhalation of amorphous silica may produce x-ray changes in the lungs without disability.
<b>Medical Conditions Aggravated by Exposure:</b>	None Known
<b>Carcinogenicity:</b>	Not listed by IARC, NTP or OSHA

**EMERGENCY AND FIRST AID PROCEDURES**

**Eye Contact:** Flush eyes with plenty of water, lifting lids periodically for at least 15 minutes. Consult a physician if irritation persists.

**Skin Contact:** Wash with soap and water

**Inhalation:** Remove from dusty area to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen. Call a physician.

**Ingestion:** Swallowing less than one ounce of material will not cause harm. For larger quantities do not induce vomiting. Give one or two glasses of water to drink and contact medical personnel or poison control center. Do not give anything by mouth to an unconscious person.

---

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

---

**Steps to be Taken in Case Material is Released or Spilled:** Common housekeeping, vacuum or scoop material into a container for reclamation or disposal.

**Waste Disposal Method:** Material which cannot be reclaimed can be land filled in accordance with local, state and federal regulations.

Product: QUIKRETE® COLOR PAK

MSDS Q

**Precautions to be Taken in Handling and Storage:** Material should be kept dry until use. Avoid contact with eyes and skin. Wash thoroughly after handling.

**Other Precautions:** Keep containers sealed to prevent contamination

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### VIII - CONTROL MEASURES

---

<b>Respiratory Protection:</b>	Wear a NIOSH/MSHA approved Dust mask if exposure limits are exceeded.
<b>Ventilation:</b>	Not required
<b>Protective Gloves:</b>	Rubber gloves
<b>Protective Glasses:</b>	Safety glasses or goggles
<b>Work/Hygiene Practices:</b>	Wash thoroughly after handling and before eating.

---

**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.



# Material Safety Data Sheet

## [OSHA 29 CFR 1910.1200]

The QUIKRETE® Companies  
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Emergency Telephone Number  
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Information Telephone Number  
(770) 216-9580

Revision: July 2003

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### SECTION I: PRODUCT IDENTIFICATION

<u>QUIKRETE® Product Name</u>	<u>Code #</u>
COLOR-PAK, CHARCOAL	1318

### SECTION II - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

Hazardous Components	CAS No.	PEL (OSHA) mg/M <sup>3</sup>	TLV (ACGIH) mg/M <sup>3</sup>
None			
Non-Hazardous Components	CAS No.	PEL (OSHA) mg/M <sup>3</sup>	TLV (ACGIH) mg/M <sup>3</sup>
Carbon Black	1333-86-4	3.5	3.5
Sodium Salt of Naphthalene-sulfonate formaldehyde condensate.	9084-06-4	not est.	not est.

### SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

<b>Appearance:</b>	fine powder
<b>Color:</b>	Black
<b>Odor:</b>	slight to none
<b>Melt Point/Freeze Point:</b>	>500° F (260° C)
<b>Boiling Point:</b>	not applicable
<b>Vapor Pressure:</b>	not applicable
<b>Specific Gravity:</b>	~1.7 to 1.9
<b>Bulk Density:</b>	not available
<b>Solubility in Water:</b>	insoluble
<b>% Volatile Organic compounds:</b>	none

### SECTION IV - FIRE AND EXPLOSION HAZARD DATA

**Flash Point:** May ignite in air above 315°C. Flash point is above 500°C

**Flammable Limits:**

**LEL:** Will not explode

**UEL:** 122 g/m<sup>3</sup>

**Auto-ignition Temperature:** Exposure to excessive heat greater than 500°F (260°C) can cause this product to ignite.

**Extinguishing Media:** Use water fog or foam to cool below ignition point. Wets poorly with water or water spray. Use extinguishing agents appropriate for the surrounding fire.



Product: QUIKRETE® COLOR-PAK, Charcoal

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**Special Fire Fighting Procedures:**

This product may contain residual oxygenated volatiles which, can further react and generate heat. In the event that the product reaches 230°F, bags should be separated by air space and allowed to cool and should be removed from the vicinity of other combustibles. It may not be obvious that carbon black is burning unless it is stirred and sparks are apparent. Firefighters should be equipped with self-contained breathing apparatus to protect against potentially toxic and irritating fumes and smoke inhalation.

---

**SECTION V - REACTIVITY DATA**

---

**Stability:** Stable to about 176°F (80°C). Keep away from flames and heat. Exposure to heat greater than 80°C can cause the portion of black iron oxide contained in this product to auto-oxidize which generates additional heat. Under certain conditions, this heat may be sufficient to cause the bag or combustible materials stored nearby to ignite.

**Incompatibility:** None

**Hazardous Decomposition or By-Products:** None

**Hazardous Polymerization:** Will not occur

---

**SECTION VI - HEALTH HAZARD DATA**

---

**\*\*\*\*\*EMERGENCY OVERVIEW\*\*\*\*\***

Solid black powder with little to no odor. Inhalation can cause temporary lung irritation. May ignite in air above 500°F. Will burn in fire. Carbon monoxide and dioxide are emitted. It may not be obvious that product is burning unless it is stirred and sparks are apparent. Packaging can burn in fire, releasing toxic gases or fumes.

\*\*\*\*\*

**Potential Health Effects:**

**Eyes:** Non-irritating to the eyes. Excessive exposure to airborne dust may reduce visibility and /or cause unpleasant deposits.

**Skin:** Will not irritate skin and is not likely to cause allergic skin reaction. Injury to the skin or mucus membranes can occur by directly mechanical action or by rigorous skin cleaning necessary for removal of dust.

**Ingestion:** Small amounts (a tablespoonful) swallowed are not likely to cause injury. Not a hazard in normal industrial use.

**Inhalation:** Not a hazard in oral industrial use. As with all dusty materials, inhalation may cause respiratory irritation, sneezing, coughing and runny nose.

**Human Effects and Symptoms of Overexposure:**

**Acute:** Dust concentrations above the permissible exposure limit may cause temporary upper respiratory tract discomfort.

**Chronic:** Epidemiological studies of workers in the carbon black producing industries of North America and Western Europe show no significant adverse health effect due to occupational exposure to carbon black. Early studies in the former USSR and Eastern Europe report respiratory diseases among workers exposed to carbon black, including: bronchitis, pneumonia, emphysema and rhinitis. Such studies are of questionable validity, due to inadequate study design and methodology, lack of appropriate controls for cigarette smoking, and other confounding factors such as concurrent exposures to carbon monoxide, coal oil and petroleum vapors. Moreover, review of these studies indicates that concentrations of carbon black were greater than current occupational exposure standards. In Monograph 65, issued in April 1996, the International Agency for Research on Cancer (IARC) re-evaluated carbon black and concluded that: "Although one cohort study on the carbon black production industry showed slight excesses of cancer, the totality of the epidemiology studies, both in the carbon black production industry and in some user industries, suggested that there is inadequate evidence for the carcinogenicity in humans of carbon black."

**Medical Conditions Aggravated By Exposure:** None known. Carbon black. Like any nuisance dust, may aggravate certain pre-existing upper respiratory disorders, such as bronchitis or asthma.

**Carcinogenicity:** IARC: Listed Group 2B/Possible Human Carcinogen. NTP: Not listed OSHA: Not listed

Product: QUIKRETE® COLOR-PAK, Charcoal

MSDS QQ

**Other:** The IARC changed the listing of Carbon Black April 12, 1996 from Category 3 (insufficient evidence to make a determination) to Category 2B (Known animal carcinogen, possible human carcinogen) gassed on the results of rat inhalation studies of carbon black, despite the lack of any parallel evidence in humans or other animal species. See section 11.

**First Aid Measures**

**Eyes:** Immediately flush eyes with plenty of water, Remove contact lenses. Continue flushing. Consult a physician if irritation persists.

**Skin:** Wash with soap and water. Wash clothing before re-use. Get medical attention in the unlikely event that irritation develops or persists.

**Ingestion:** Swallowing less than announce will not cause harm. For larger amounts, do not induce vomiting, but give one or two glasses of water to drink and contact medical personnel or poison control center. Do not give anything by mouth to an unconscious person.

**Inhalation:** No specific treatment is necessary since this material is not likely to be hazardous by inhalation. If exposed to excessive levels of dust or fumes, move from dusty area to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get immediate medical attention.

**Toxicological Information:**

**Eyes:** Not irritating to rabbit eyes.

**Skin:** Not irritation to rabbit skin Dermal, LD 50 greater than 240 mg/kg, IP injection, mice and rats.

**Ingestion:** Non irritating. The oral, LD 50 for rats is grater than 5000 mg/L.

**Inhalation:** Non irritating. LC 50 greater than 156 mg/m<sup>3</sup>, mice and rats.

**Subchronic:** Data not established for product.

**Chronic/Carcinogenicity:** Data not established for product.

**Other (Mutagenic, Teratogenic, Reproductive Tests):** This product contains less than 0.1% of absorbed PACS have been found to be carcinogens in animal studies. No correlation carcinogenic effect, however, has been observed in humans due to exposure to carbon black. Chronic inflammation. Lung fibrosis and lung tumors have been observed in some rats experimentally exposed, for long periods of time, to very high concentrations of carbon black and several other insoluble fine dust particles. Tumors have not been observed in other animal species (i.e. mouse and hamster) under similar circumstances and study conditions. Researchers conduction the rat inhalation studies believe that these effects most likely result from the massive accumulation of small dust particles in the lung which overwhelm the natural lung clearance mechanism, known as the "lung overload" phenomenon, rather that from a specific chemical effect of the dust particles in the lung.

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

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**Accidental Release Measures:****Steps to be Taken in Case Material is Released or Spilled:**

Common housekeeping, vacuum or scoop material into a container for reclamation or disposal.

**Small Spill:** If dust is generated, use appropriate respiratory protection. Vacuum or scoop material into an appropriately marked container for re-use or disposal. Avoid excessive generation of dust.

**Large Spill:** Use recommended protective clothing and respiratory protection. Use shovel to reclaim material. Vacuum or scoop material into an appropriately marked container for re-use or disposal. Avoid excessive generation of dust. Spill area can be washed with water. Collect wash water for approved disposal. Prevent runoff from entering storm sewers and ditches, which lead to natural waterways.

**Waste Disposal Method:** Material which cannot be reclaimed can be land filled in accordance with local, state and federal regulations.

**Handling and Storage:**

**Precautions to be Taken in Handling and Storage:** Material should be kept dry until use. Avoid contact with eyes and skin. Wash thoroughly after handling.

Product: QUIKRETE® COLOR-PAK, Charcoal

MSDS QQ

**Storage:** Store dry at ambient temperature away from food and beverages, excessive heat or flame sources (furnace, kilns, boilers etc.). Avoid breathing dust. Avoid contact with eyes and skin. Wash thoroughly after handling.

**Handling:** Avoid prolonged or repeated breathing of dust. Avoid getting in eyes or on skin. Wash thoroughly after handling. Avoid contact with moisture. Re-seal bag immediately after use.

**Storage Temperature (Min/Max):** Ambient/50°C (122°F)

**Shelf Life:** Unlimited in closed container

**Special Sensitivity:** Excessive heat and strong oxidizers such as chlorates, Bromates and nitrates.

**Other Precautions:** Keep containers sealed to prevent contamination

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### VIII - CONTROL MEASURES

---

**Engineering Controls:** Maintain air levels below the recommended exposure limit using exhaust ventilation  
If necessary.

**Respiratory Protection:** Work ambient dust concentrations should be monitored and if the recommended exposure limit is exceeded, wear a NIOSH/MSHA approved dust mask

**Ventilation:** Not required

**Protective Gloves:** Rubber gloves

**Protective Glasses:** Safety glasses or goggles

**Skin:** Body-covering clothing. Rubber, plastic, leather or cloth gloves are suggested to facilitate personal hygiene.

**Work/Hygiene Practices:** Wash thoroughly after handling and before eating.

**Other:** Emergency showers and eye wash stations should be available. Educate and train employees in the safe use and handling of hazardous chemicals.

**Disposal Considerations:**

Material which cannot be re-used should be disposed in accordance with federal, state and local environmental control regulations at a n authorized site. This product when discarded as sold is not a RCRA hazardous waste. 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.

(40CFR 261.20-24)

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# Material Safety Data Sheet [OSHA 29 CFR 1910.1200]

The QUIKRETE® Companies  
One Securities Centre  
3490 Piedmont Road, Suite 1300  
Atlanta, GA 30329

Emergency Telephone Number  
(770) 216-9580

Information Telephone Number  
(770) 216-9580

Revision: July 2003

MSDS RR

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## SECTION I: PRODUCT IDENTIFICATION

---

<u>QUIKRETE® Product Name</u>	<u>Code #</u>
QUIKRETE® CONCRETE & STUCCO WASH	8601- 15

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## SECTION II - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

---

<b>Hazardous Components:</b>	<b>CAS No.</b>	<b>PEL (OSHA) mg/M<sup>3</sup></b>	<b>TLV (ACGIH) mg/M<sup>3</sup></b>
Sodium Hypochlorite	7681-52-9	NA	NA
Sodium Hydroxide	1310-73-2	2mg/m <sup>3</sup>	2mg/m <sup>3</sup>

---

## SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

---

<b>Appearance:</b>	Clear liquid	<b>Odor:</b>	Slight chloride odor
<b>Melt Point/Freeze Point:</b>	NDA	<b>Boiling Point:</b>	214°F (101°C)
<b>Vapor Pressure:</b>	NDA	<b>Vapor Density:</b>	>1
<b>Specific Gravity:</b>	1.06	<b>Evaporation Rate:</b>	NDA
<b>Solubility in Water:</b>	Complete		

---

## SECTION IV - FIRE AND EXPLOSION HAZARD DATA

---

**Flash Point:** >205°F (96°C)

**Flammable Limits:**

**LEL:** NDA

**UEL:** NDA

**Method Used:** TCC

**Auto-ignition Temperature:** NDA

**Extinguishing Media:** Water Fog, Foam. Carbon dioxide, dry chemical

**Special Fire Fighting Procedures:** Wear appropriate protective clothing. Use Self-contained breathing apparatus.

**Unusual Fire and Explosive Hazards:** Chlorine

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## SECTION V - REACTIVITY DATA

---

**Stability:** Stable      **Incompatibility:** Acids, Ammonia

**Hazardous Decomposition or By-Products:** Oxygen, Chlorine

**Hazardous Polymerization:** Will not occur

**Conditions to Avoid:** NDA



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**SECTION VI - HEALTH HAZARD DATA**

---

**First Aid Measures:**

**Eyes:** Flush immediately with copious amount of cool, fresh water. Make certain contact lenses have been removed. So both upper and lower lids may be thoroughly flushed. Seek medical attention if irritation continues.

**Skin:** Remove all contaminated clothing. Flush affected area with plenty of fresh water. Seek medical attention if irritation persists.

**Ingestion:** Immediately rinse mouth with plenty of fresh water. Do not induce vomiting unless told to do so by physician. Never give anything by mouth to an unconscious person. Seek medical attention immediately.

**Inhalation:** Remove to fresh air. Seek immediate medical attention if difficulty in breathing.

**Signs and Symptoms of Exposure:** Skin, nose, eye or throat irritation.

**Human Effects and Symptoms of Overexposure:**

**Acute:** Harmful if swallowed or inhaled. May cause severe skin, eyes nose or throat irritation.

**Chronic:** May cause sensitization.

**Medical Conditions Aggravated By Exposure:** Chronic respiratory problems such as asthma, emphysema or obstructive lung disease.

**Carcinogenicity:** IARC: NO            NTP: No            OSHA: Not listed

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

---

**Accidental Release Measures:****Steps to be Taken in Case Material is Released or Spilled:**

Material should be contained and absorbed with suitable material, such as sand, and properly disposed of.

**Waste Disposal Method:** Disposal of product in accordance with local, county, state, and federal regulations.

**Handling and Storage:**

**Storage:** Store away from high temperature and direct sunlight.

**Handling:** Use with protective equipment, gloves, glasses, shoes, etc.

**Other Precautions:** Deep containers tightly closed at all times. Store away from incompatible materials. Keep out of reach of children.

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**VIII - CONTROL MEASURES**

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**Respiratory Protection:** Product is recommended for outdoor use only. No respiratory protection required if ventilation adequate. Avoid prolonged breathing of fumes.

**Ventilation:** Not required for outdoor use.

**Protective Gloves:** Rubber gloves of chemical resistant type.

**Protective Glasses:** Safety glasses or goggles

**Other Protective Clothing or Equipment:** Rubber shoes, boots and aprons.

**Work/ hygienic Practices:** Normal good housekeeping. Store product in room temperature avoiding direct sunlight and high temperatures.

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# Material Safety Data Sheet [OSHA 29 CFR 1910.1200]

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One Securities Centre  
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Atlanta, GA 30329

Emergency Telephone Number  
(770) 216-9580

Information Telephone Number  
(770) 216-9580

Revision: July 2003

MSDS UU

---

## SECTION I: PRODUCT IDENTIFICATION

---

<b>QUIKRETE® Product Name</b>	<b>Code #</b>
QUIKRETE® EXPANSION JOINT	6917

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## SECTION II - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

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Ingredient	CAS Number	OSHA PEL <i>mg/m<sup>3</sup></i>	ACGIH TLV <i>mg/m<sup>3</sup></i>
Cellulose-respirable	9004-34-6	5	5
Asphalt-fume	8052-42-4	NONE	5
Clay-respirable	NONE	5	5
Carbon Black	1333-86-4	3.5	3.5

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## SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

---

<b>Boiling Point:</b>	N/A	<b>SP. Gravity:</b>	~0.3
<b>Vapor Pressure:</b>	N/A	<b>PCT. Volatiles:</b>	may absorb ~1-10% moisture
<b>Vapor Density:</b>	N/A	<b>EVAP. Rate:</b>	N/A
<b>Sol. In Water:</b>	slight		

**Appearance/Odor:** Black board with slight petroleum odor.

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## SECTION IV - FIRE AND EXPLOSION DATA

---

<b>Flash Point (method):</b>	N/A
<b>Flammable Limits:</b>	LEL % N/A UEL % N/A
<b>Extinguishing Media:</b>	Water fog, foam, or carbon dioxide
<b>Sp. Fire Fighting Procedures:</b>	Since burning may produce toxic fumes, wear a self-contained breathing apparatus (SCBA) with a full facepiece. Wear protective clothing if asphalt is molten.

**Unusual Fire & Explosion Hazards:** May be prone to smolder longer than wood after flames have extinguished



PRODUCT: EXPANSION JOINTS

MSDS UU

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**SECTION V – HEALTH HAZARD DATA**

---

**Primary Routes of Exposure:** Inhalation if dust is created during fabrication  
**Signs & Symptoms of Overexposure:** Acute Exposure – temporary irritation of eyes, nose, throat, and lungs  
Chronic Exposure – None expected

**Emergency and First Aid Procedures:**  
Inhalation – remove to fresh air  
Eyes – flush with running water for 15 minutes  
Skin – wash with soap & water  
Ingestion – N/A  
Other – this product is not expected to present health hazards under normal use.

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**SECTION VI – REACTIVITY DATA**

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**Stability / Polymerization:** This product is stable under normal atmospheric conditions.  
**Conditions to avoid:** Avoid contact with heat, flame or fluorine.  
**Incompatibilities:** Incompatible with strong oxidizing agents, such as perchloric or nitric acids, etc.

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**SECTION VI – REACTIVITY DATA (Continued)**

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**Hazardous Decomposition Products:** Thermal oxidative decomposition of asphalt can produce carbon monoxide, various aliphatic hydrocarbons, and hydrogen sulfide. Inhalation of carbon monoxide and hydrogen sulfide produces tissue hypoxia (insufficient oxygen). Inhalation of aliphatic hydrocarbons can result in asphyxia.

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**SECTION VII – TOXICOLOGICAL INFORMATION**

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The U. S.S National Toxicology Program (NTP) or the U.S. Occupational Safety and Health Administration (OSHA) do not designate carbon black as a carcinogen. The American Conference of Governmental Industrial Hygienists (ACGIH) classifies carbon black as 4A, Not Classifiable as a Human Carcinogen. Components of this product are not listed as toxic chemicals under Section 313 of Title III of the Superfund Amendments and Reauthorization Act (SARA). The U.S. National Institute of Occupational Safety and Health (NIOSH) criteria document on carbon black recommends only carbon blacks with polycyclic aromatic hydrocarbons (PAH) levels greater than 0.1% be considered suspect carcinogens. The carbon black used in this product contains less than 0.1% of PAH. The International Agency for Research on Cancer (IARC) classifies carbon black, as Group 2B, carbon black is possibly carcinogenic to humans, based on rat inhalation studies. In the Monograph 65, issued in 1996, IARC reevaluated carbon black and concluded, “There is inadequate evidence for the carcinogenicity of carbon black”.

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**SECTION VIII– SPILL AND LEAK PROTECTION**

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**Steps to be taken in case material is released or spilled:** Normal housekeeping  
**Disposal Method:** In accordance with federal, state, and local regulations  
**Ventilation:** When fabricating use sufficient exhaust ventilation to maintain airborne concentrations below TLV.  
**Respiratory Protection:** Half mask air purifying respirator with filters approved for dust, mist and fume. Only NIOSH approved devices should be used.  
**Protective Clothing:** As necessary to prevent skin irritation.  
**Eye Protection:** As necessary to prevent foreign bodies from entering the eye.

PRODUCT: EXPANSION JOINTS

MSDS UU

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**SECTION X – HANDLING AND STORAGE**

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Store in a dry well-ventilated area. Material should be kept dry before application.

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**SECTION XI – SPECIAL PRECAUTIONS**

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Use of high-speed rotary cutting tools may create excessive dust. Avoid dust inhalation with adequate ventilation and the use of respiratory protection. Cellulose dust can present an explosion hazard if a high concentration dust cloud contacts an ignition source (depending on particle size and humidity).

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# Material Safety Data Sheet [OSHA 29 CFR 1910.1200]

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Emergency Telephone Number  
(770) 216-9580

Information Telephone Number  
(770) 216-9580

Revision: July 2003

MSDS V

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## SECTION I: PRODUCT IDENTIFICATION

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<u>QUIKRETE® Product Name</u>	<u>Code #</u>
Rock Salt	9002

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## SECTION II - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

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Components	CAS No.	PEL (OSHA) mg/M <sup>3</sup>	TLV (ACGIH) mg/M <sup>3</sup>
Sodium Chloride	7647-14-5	Non hazardous	

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## SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

---

<b>Solubility in water:</b>	36 gm/ 100 cc at 20°C	<b>Specific Gravity:</b>	2.165
<b>Appearance and Odor:</b>	White to off-white -No odor	<b>Boiling Point:</b>	1413°C
<b>% Non-Volatile:</b>	100 %	<b>pH:</b>	about 7

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## SECTION IV - FIRE AND EXPLOSION HAZARD DATA

---

**Flammability:** Noncombustible and not explosive.

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## SECTION V - REACTIVITY DATA

---

**Stability:** Stable.

**Condition to Avoid:** Will react with strong acids to release HCl and strong oxidizing agents to release Cl<sub>2</sub>.

**Hazardous decomposition products:** Will release toxic fumes of Cl<sub>2</sub> and Na<sub>2</sub>O

**Hazardous Polymerization:** Will Not Occur.

---

## SECTION VI - HEALTH HAZARD DATA

---

**Oral Toxicity:** Oral rat LD50: 3000 mg/kg (RTECS,1986)

**Dermal Toxicity:** Skin irritation rabbit: 500 mg/24 hr. Mild (RTECS,1986)

**Eye:** Eye irritation rabbit: 100 mg/24 hr. Moderate (RTECS,1986)

**Inhalation:** No information available



Product: QUIKRETE® ROCK SALT

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**EFFECTS OF OVEREXPOSURE****Ingestion:** Very large doses can cause vomiting, diarrhea, and prostration.**Skin Contact:** Not expected to be a health hazard.**Eye Contact:** May cause irritation.**Inhalation:** Inhalation of dust may cause mild irritation to mucous membranes, nose and throat. Symptoms may include coughing, dryness and sore throat.**Acute Systemic Effects:** Dehydration and congestion may occur in internal organs. Hypertonic salt solutions can produce inflammatory reactions in the gastrointestinal tract.**Chronic System Effects:** No information available.**FIRST AID PROCEDURES****Eye Contact:** Immediately flush eyes with plenty of water for at least 15 minutes. Call a physician.**Skin Contact:** Wash exposed area with soap and water. Get medical attention if irritation develops.**Inhalation:** Remove to fresh air. Get medical attention for any breathing difficulty.**Ingestion:** If large amounts were swallowed, get medical advice.

---

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

---

Transport in dry equipment. Storage should be in a dry location.

**Spill protection:** containerize for reclamation or disposal. Vacuuming or wet sweeping may be used to avoid dust dispersal.**Disposal:** What can not be reclaimed may be delivered to an approved waste disposal facility, or if local ordinances allow, can be dissolved in sufficient amounts of water to meet water quality standards, and flushed down the sewer drain. Insure compliance with local, state and federal regulations. Some States have set a maximum limit on chlorides in waste effluent. The only practical way of meeting the limits is to dilute the waste with additional water.

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**SECTION VIII - CONTROL MEASURES**

---

**Respiratory Protection:** For conditions where exposure to the dust is apparent, a NIOSH approved dust/mist respirator may be worn.**For Hands, Body:** If deemed necessary, wear protective gloves and clean body-covering clothing.**For Eyes:** Use chemical safety goggles. Contact lenses should not be worn when working with this material. Maintain eye wash fountain and quick-drench facilities in the work area.**Ventilation:** In general, dilution ventilation is a satisfactory health hazard control for this substance. However, if conditions of use create discomfort to the worker, a local exhaust system should be considered.

---

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# Material Safety Data Sheet [OSHA 29 CFR 1910.1200]

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Revision: July 2003

MSDS W

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## SECTION I: PRODUCT IDENTIFICATION

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**QUIKRETE® Product Name**  
ACRYLIC CONCRETE CURE AND SEAL

**Code #**  
8800

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## SECTION II - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

---

Hazardous Components	CAS No.	PEL (OSHA) mg/M <sup>3</sup>	TLV (ACGIH) mg/M <sup>3</sup>
Acrylic Polymer	Not Hazardous	None	None
Propylene Glycol phenyl ether	770-35-4	(1)	(1)

(1) None established.

---

## SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

---

**Solubility in Water:** Infinitely Dilutable.

**Physical Appearance and Odor:** Milky white water emulsion with a slight ether odor.

**Boiling Point:** ~100°C (212°F)

**Freezing Point:** ~ -1°C (30°F)

---

## SECTION IV - FIRE AND EXPLOSION HAZARD DATA

---

**Unusual hazards:** This water based dispersion can splatter at temperatures above 100°C (212°F). Polymer film can burn once the water has evaporated. Product also contains less than 5 % of a solvent with a Flash Point of 115°C (240°F)

**Extinguishing Agents:** Use methods appropriate for surrounding fire.

**Personal Protective Equipment:** For fire fighting, wear self-contained breathing apparatus and full protective gear.

### SECTION V - REACTIVITY DATA

**Stability:** This material is considered stable. However, avoid temperatures above 177°C/350°F, the onset of polymer decomposition. Thermal decomposition is dependent on time and temperature.

**Hazardous Decomposition Products:** Thermal decomposition may yield acrylic monomers.

**Hazardous Polymerization:** Will not occur.

**Incompatibility:** Avoid contact with strong oxidizing agents or strong alkalis.





Product: ACRYLIC CONCRETE CURE AND SEAL

MSDS W

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**SECTION VI - HEALTH HAZARD DATA**

---

**Route(s) of Entry:** Inhalation, Skin, Ingestion**HEALTH EFFECTS FROM OVEREXPOSURE**

Inhalation of vapor or mist can cause the following: headache - nausea - irritation of nose, throat, and lungs

**Eye Contact:** Direct contact with material can cause irritation and possible corneal injury.**Skin Contact:** Prolonged or repeated skin contact can cause slight irritation.**FIRST AID****Skin:** Thoroughly wash affected area with soap and water. Remove contaminated clothing.**Eye Contact:** Flush with large amounts of water, lifting the upper and lower lids occasionally. Get medical attention.**Ingestion:** If swallowed, give two glasses of water. If large amounts are ingested, induce vomiting with Ipecac syrup or by placing finger at the back of the throat. Never give anything by mouth to an unconscious person. Get medical attention.**Inhalation:** Remove to fresh air if effects occur. Consult physician.

---

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

---

**AVOID SKIN AND EYE CONTACT AND AVOID BREATHING VAPORS****Storage Conditions:** Keep from freezing; material may coagulate. The minimum recommended storage temperature for this material is 1°C/34°F. The maximum recommended storage temperature for this material is 49°C/120°F.**Personal Protective Equipment:****Eye protection:** Use chemical splash goggles (ANSI Z87.1 or approved equivalent)**Hand protection:** Neoprene gloves are recommended. Gloves of other chemically resistant materials may not provide adequate protection.

---

**SECTION VIII - CONTROL MEASURES**

---

**SPILL AND LEAK HANDLING**

Keep spectators away. Floor may be slippery; use care to avoid falling. Contain spills immediately with inert materials (e.g. sand, earth). Transfer liquids and solid diking material to separate suitable containers for recovery or disposal.

**CAUTION:** Keep spills and cleaning runoff out of municipal sewers and open bodies of water.**VENTILATION**Use local exhaust ventilation with a minimum capture velocity of 100 ft/min. (30 m/min.) at the point of vapor evolution. Refer to the current edition of Industrial Ventilation: A Manual of Recommended Practice published by the American Conference of Governmental Industrial Hygienists for information on the design, installation, use, and maintenance of exhaust systems. Other Protective Equipment: Facilities storing or utilizing this material should be equipped with an eyewash facility.**WASTE DISPOSAL**

Coagulate the emulsion by the stepwise addition of ferric chloride and lime. Remove the clear supernatant and flush to a chemical sewer. Incinerate liquid and contaminated solids in accordance with local, state, and federal regulations.

---

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# Material Safety Data Sheet

## [OSHA 29 CFR 1910.1200]

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Revision: July 2003

MSDS X

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### SECTION I: PRODUCT IDENTIFICATION

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<u>QUIKRETE® Product Name</u>	<u>Code #</u>
GRAY CONCRETE CRACK SEAL	8640-00
LATEX BLACKTOP CRACK SEAL	8640-05

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### SECTION II - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

---

<b>Hazardous Components</b>	<b>CAS No.</b>	<b>PEL (OSHA)</b> mg/M <sup>3</sup>	<b>TLV (ACGIH)</b> mg/M <sup>3</sup>
Acrylic Polymer	Not Hazardous	None	None
Ethylene Glycol	107-21-1	50 ppm (1)	50 ppm (1)
Limestone/Marble	1317-65-3	5	5
2,2,4-trimethyl-1,3-pentanediol- mono isobutyrate	025265-77-4	(2)	(2)
Iron Oxide Pigments	01309-37-1	5	5

(1) Limits for Vapor & Mist  
(2) None Established

---

### SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

---

**Solubility in Water:** Dilutable.

**Physical Appearance and Odor:** Gray or black viscous liquid with a slight ether and ammonia odor.

**Boiling Point:** ~100°C (212°F)

**Freezing Point:** ~ -1°C (30°F)

---

### SECTION IV - FIRE AND EXPLOSION HAZARD DATA

---

**Unusual Hazards:** This water based dispersion can splatter at temperatures above 100°C (212°F). Polymer film can burn once the water has evaporated. Product also may contain less than 1 % of a solvent with a Flash Point of 120°C (248°F)

**Extinguishing Agents:** Use methods appropriate for surrounding fire.

**Personal Protective Equipment:** For fire fighting, wear self-contained breathing apparatus and full protective gear.



---

**SECTION V - REACTIVITY DATA**

---

**Stability:** This material is considered stable. However, avoid temperatures above 177°C/350°F, the onset of polymer decomposition. Thermal decomposition is dependent on time and temperature.

**Hazardous Decomposition Products:** Thermal decomposition may yield acrylic monomers.

**Hazardous Polymerization:** Will not occur.

**Incompatibility:** Avoid contact with strong oxidizing agents or strong alkalis.

---

**SECTION VI - HEALTH HAZARD DATA**

---

<b>Route(s) of Entry:</b>	Inhalation?	Yes
	Skin?	Yes
	Ingestion?	Yes

**HEALTH EFFECTS FROM OVEREXPOSURE**

Inhalation of vapor or mist can cause the following: headache - nausea - irritation of nose, throat, and lungs

**Eye Contact:** Direct contact with material can cause irritation and possible corneal injury.

**Skin Contact:** Prolonged or repeated skin contact can cause slight irritation.

**FIRST AID**

**Skin:** Thoroughly wash affected area with soap and water. Remove contaminated clothing.

**Eye Contact:** Flush with large amounts of water, lifting the upper and lower lids occasionally. Get medical attention.

**Ingestion:** If swallowed, give two glasses of water. If large amounts are ingested, induce vomiting with Ipecac syrup or by placing finger at the back of the throat. Never give anything by mouth to an unconscious person. Get medical attention.

**Inhalation:** Remove to fresh air if effects occur. Consult physician.

---

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

---

AVOID SKIN AND EYE CONTACT AND AVOID BREATHING VAPORS.

**Storage Conditions:** Keep from freezing; material may coagulate. The minimum recommended storage temperature for this material is 1°C/34°F. The maximum recommended storage temperature for this material is 49°C/120°F.

**PERSONAL PROTECTIVE EQUIPMENT**

**Eye protection:** Use chemical splash goggles (ANSI Z87.1 or approved equivalent)

**Hand protection:** Neoprene gloves are recommended. Gloves of other chemically resistant materials may not provide adequate protection.

---

**SECTION VIII - CONTROL MEASURES**

---

**Spill and leak handling:** Keep spectators away. Floor may be slippery; use care to avoid falling. Contain spills immediately with inert materials (e.g. sand, earth). Transfer liquids and solid diking material to separate suitable containers for recovery or disposal.

**CAUTION:** Keep spills and cleaning runoff out of municipal sewers and open bodies of water.

**Ventilation:** Use local exhaust ventilation with a minimum capture velocity of 100 ft/min. (30 m/min.) at the point of vapor evolution. Refer to the current edition of Industrial Ventilation: A Manual of Recommended Practice published

PRODUCT: QUIKRETE<sup>®</sup> CRACKSEAL

MSDS X

by the American Conference of Governmental Industrial Hygienists for information on the design, installation, use, and maintenance of exhaust systems.

**Other Protective Equipment:** Facilities storing or utilizing this material should be equipped with an eyewash facility.

**WASTE DISPOSAL:** Coagulate the emulsion by the stepwise addition of ferric chloride and lime. Remove the clear supernatant and flush to a chemical sewer. Incinerate liquid and contaminated solids in accordance with local, state, and federal regulations.

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# Material Safety Data Sheet [OSHA 29 CFR 1910.1200]

The QUIKRETE® Companies  
One Securities Centre  
3490 Piedmont Road, Suite 1300  
Atlanta, GA 30329

Emergency Telephone Number  
(770) 216-9580

Information Telephone Number  
(770) 216-9580

Revision: July 2003

MSDS Y

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## SECTION I: PRODUCT IDENTIFICATION

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**QUIKRETE® Product Name**  
CONCRETE AND ASPHALT CLEANER

**Code #**  
8601-01, 14

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## SECTION II - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

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Hazardous Components	CAS No.	PEL (OSHA) mg/M <sup>3</sup>	TLV (ACGIH) mg/M <sup>3</sup>
Glycol Ether	34590-94-8	(1)	100 ppm
Sodium Hydroxide	1310-73-2	2	2

(1) None established

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## SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

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**Solubility in Water:** Infinitely Dilutable.

**Physical Appearance and Odor:** Clear Blue Liquid with Sassafras odor

**Boiling Point:** ~212°F (100°C) **Freezing Point:** ~ 30°F (-1°C)

**Flash Point:** Glycol Ether component has a flash point of 208°F (98°C)

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## SECTION IV - FIRE AND EXPLOSION HAZARD DATA

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**Unusual hazards:** None

**Extinguishing Agents:** Use methods appropriate for surrounding fire.

**Personal Protective Equipment:** For fire fighting, wear self-contained breathing apparatus and full protective gear.

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## SECTION V - REACTIVITY DATA

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**Stability:** Stable.

**Conditions to avoid:** Strong Oxidizing agents

**Hazardous Decomposition Products:** Thermal decomposition may yield carbon monoxide and carbon dioxide.

**Hazardous Polymerization:** Will not occur.

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## SECTION VI - HEALTH HAZARD DATA

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<b>Route(s) of Entry:</b>	Inhalation?	Yes
	Skin?	Yes
	Ingestion?	Yes



PRODUCT: CONCRETE AND ASPHALT CLEANER

MSDS Y

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**HEALTH EFFECTS FROM OVEREXPOSURE****Eye Contact:** Direct contact with material can cause irritation and possible corneal injury.**Skin Contact:** Prolonged or repeated skin contact can cause slight irritation.**FIRST AID****Inhalation:** Remove to fresh air**Skin:** Thoroughly wash affected area with water. Remove contaminated clothing.**Eye Contact:** Flush with large amounts of water, lifting the upper and lower lids occasionally. Get medical attention.**Ingestion:** If swallowed, give two glasses of water and induce vomiting with Ipecac syrup or by placing finger at the back of the throat. never give anything by mouth to an unconscious person. Get medical attention immediately.

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

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**PERSONAL PROTECTIVE EQUIPMENT****Eye protection:** Use chemical splash goggles (ANSI Z87.1 or approved equivalent)**Hand protection:** Neoprene gloves are recommended. Gloves of other chemically resistant materials may not provide adequate protection.

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**SECTION VIII - CONTROL MEASURES**

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**Spill and leak handling:** Rinse the area thoroughly with water.**Ventilation:** Use in well ventilated area.**Other Protective Equipment:** Facilities storing or utilizing this material should be equipped with an eyewash facility.**Storage Conditions:** Keep away from freezing. The minimum recommended storage temperature for this material is 0°C/32°F. The maximum recommended storage temperature for this material is 49°C/120°F.**WASTE DISPOSAL**

Dispose in accordance with local, state, and federal regulations.

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## SECTION I: PRODUCT IDENTIFICATION

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Product Types: PRE-MIXED MINE SEALANTS BASED ON SODIUM SILICATE

<u>QUIKRETE® Product Name</u>	<u>Code #</u>
REDI-SEAL MINE SEALANT	1225-52, 61
FR 200 FIREPROOF SEALANT	1225-59

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## SECTION II - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

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<b>Hazardous Components</b>	<b>CAS No.</b>	<b>PEL (OSHA) mg/M<sup>3</sup></b>	<b>TLV (ACGIH) mg/M<sup>3</sup></b>
Silica Sand, crystalline	14808-60-7	<u>10</u> %SiO <sub>2</sub> +2	0.05 (respirable)
Sodium Silicate (Silicic Acid, Sodium Salts)	65997-15-1	NE	NE
Clay	01332-58-7	5	5

Products in this family contain small amounts of crystalline silica which occurs naturally in clay. The product is delivered to the user as a paste-like material and should not pose any air borne dust hazards. Dry sanding of the hardened material could result in the release small amounts of respirable silica.  
NE= None Established

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## SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

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<b>Appearance:</b>	White, Yellow or Gray Paste	<b>Specific Gravity:</b>	1.4 to 1.85
<b>Melting Point:</b>	NA (High solids suspension in water), Water will freeze at 32 F (0 C)		
<b>Boiling Point:</b>	NA (High solids suspension in water), Water will boil at 212 F (100 C)		
<b>Vapor Pressure:</b>	Unknown	<b>Vapor Density:</b>	Unknown
<b>Evaporation Rate:</b>	Unknown	<b>pH:</b>	11.3-11.7
<b>Solubility in Water:</b>	Partly water soluble.	<b>Odor:</b>	None

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## SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

---

**Flammability:** Non-Flammable.

**Special Fire Fighting Procedures:** Avoid contact. Wash affected areas with plenty of water.

**Unusual fire and explosion hazards:** None





PRODUCT: PRE-MIXED MINE SEALANTS BASED ON SODIUM SILICATE

MSDS Z

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**SECTION V - REACTIVITY DATA**


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**Stability:** Stable**Incompatibility (Materials to Avoid):** Heat is generated when mixed with strong acids. Acids cause gelatin.**Hazardous Decomposition or By-products:** None**Hazardous Polymerization:** Will Not Occur.**Condition to Avoid:** Keep container sealed until used to preserve product utility.

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**SECTION VI - HEALTH HAZARD DATA**


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<b>Route(s) of Entry:</b>	Inhalation	Yes
	Skin	Yes
	Ingestion	Yes

**Acute Exposure:** Product is highly alkaline. Exposure can burn the eyes, dry the skin, cause alkali burns and effect the mucous membranes and upper respiratory and gesture-intestinal tracts.**Chronic Exposure:** Continued over exposure to highly alkaline material will increase the severity of the alkali burns.**Carcinogenicity Listings:** None of the major ingredients in these products are listed as carcinogenic. Silica is a very minor impurity in these products. Silica is listed as a carcinogen as follows:

NTP:	Known carcinogen
OSHA:	Not listed as a carcinogen
IARC Monographs:	Group 1 Carcinogen
California Proposition 65:	Known carcinogen

NTP: The National Toxicology Program, in its "Ninth Report on Carcinogens" (released May 15, 2000) concluded that "Respirable crystalline silica (RCS), primarily quartz dusts occurring in industrial and occupational settings, is *known to be a human carcinogen*, based on sufficient evidence of carcinogenicity from studies in humans indicating a causal relationship between exposure to RCS and increased lung cancer rates in workers exposed to crystalline silica dust (reviewed in IAC, 1997; Brown *et al.*, 1997; Hind *et al.*, 1997)

IARC: The International Agency for Research on Cancer ("IARC") concluded that there was "*sufficient evidence* in humans for the carcinogenicity of crystalline silica in the forms of quartz or cristobalite from occupational sources", and that there is "*sufficient evidence* in experimental animals for the carcinogenicity of quartz or cristobalite." The overall IARC evaluation was that "crystalline silica inhaled in the form of quartz or cristobalite from occupational sources is *carcinogenic to humans* (Group 1)." The IARC evaluation noted that "carcinogenicity was not detected in all industrial circumstances or studies. Carcinogenicity may be dependent on inherent characteristics of the crystalline silica or on external factors affecting its biological activity or distribution of its polymorphs." For further information on the IARC evaluation, see IARC Monographs on the Evaluation of carcinogenic Risks to Humans, Volume 68, "Silica, Some Silicates..." (1997) To avoid any possible exposure to silica dust, **DO NOT DRY SAND THIS PRODUCT**. Dust from sanding the product can contribute to the chronic effects of exposure to other sources of respirable silica. Exposure to respirable silica can cause inflammation of the lining tissue of the interior of the nose and inflammation of the cornea. Hypersensitive individuals may develop an allergic dermatitis. Respirable crystalline silica (quartz) can cause silicosis, a fibrosis (scarring) of the lungs and possibly cancer. There is evidence that exposure to respirable silica or the disease silicosis is associated with an increased incidence of Scleroderma, tuberculosis and kidney disorders.

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**SECTION IV - FIRE AND EXPLOSION HAZARD DATA**


---

PRODUCT: PRE-MIXED MINE SEALANTS BASED ON SODIUM SILICATE

MSDS Z

**Signs and Symptoms of Exposure:** Burning of the eyes, reddening of the skin. Excessive exposure to skin and eyes can cause caustic burns as severe as third degree.

**Medical Conditions Generally Aggravated by Exposure:** Individuals with sensitive skin should be precluded from using this material.

#### EMERGENCY AND FIRST AID PROCEDURES

**Eyes:** Flush eyes and eye lids thoroughly with clean water for at least 15 minutes. Always seek medical attention.

**Skin:** Wash exposed skin areas with soap and water.

**Inhalation:** Flush mouth and nasal passages thoroughly with water.

**Ingestion:** Drink milk or water, then drink dilute vinegar. Do not induce vomiting. Consult a physician immediately.

**Note to physician:** Treat as caustic poisoning/burning.

---

#### SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE

---

**Spills:** Scrape up the major portion of the spill and allow it to harden. Rinse the contaminated surface with plenty of water. A stiff bristled brush will be helpful in dislodging the material from the surface.

**Waste Disposal Method:** Dispose of packaging and material in an approved sanitary land fill. This product is not classified as a hazardous waste under RCRA or CERCLA.

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#### SECTION VIII - CONTROL MEASURES/PERSONAL PROTECTION

---

**Eyes:** Wear safety glasses.

**Skin:** Always wear rubber, neoprene, vinyl or other alkali impervious gloves when handling this product. Do not wear cloth gloves which can absorb the alkali and increase the alkali burn potential of the product. Wear protective clothing to avoid skin contact. Wash contaminated clothing before reuse.

WARN EMPLOYEES AND/OR CUSTOMERS OF THE HAZARDS AND REQUIRED OSHA PRECAUTIONS ASSOCIATED WITH THE USE OF THIS PRODUCT.

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## SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

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**Flammability:** Non-Flammable.

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**Unusual fire and explosion hazards:** None



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**SECTION V - REACTIVITY DATA**


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