

# Boulder Image

## Material Safety Data Sheet

### 1. Chemical Product and Company Identification

**Boulder Image**  
4209 South 36<sup>th</sup> Place  
Phoenix, Arizona 85040

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4209 South 36<sup>th</sup> Place  
Phoenix, Arizona 85040

**Telephone Number:** (602) 438-9464  
**24-Hour Emergency Telephone Number:** (800) 627-2521

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**Product Name:** TechSTONE Systems Boulder Strengthener (Component of Filler Mix)

**LIIN:** 00N090388

**HMIS Classification:**    **H**    **F**    **R**  
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**Prepared By:** Boulder Image Loss Control

**Preparation Date:** June 01, 2001

**Review Dates:** April 05, 2002

### 2. Composition, Information on Ingredients

Ingredients / Components	CAS #	RTECS	OSHA PEL	ACGIH TLV OTHER	WT %	EPA RPT QTY	DOT RPT QTY
Tricalcium Silicate; (Tri-Calcium Silicate)	12168-85-3	N/K (FP N)	N/K (FP N)	N/K (FP N)	20-70	N/A	N/A
Dicalcium Silicate; (Di-Calcium Silicate)	10034-77-2	N/K (FP N)	N/K (FP N)	N/K (FP N)	10-60	N/A	N/A
Aluminum Calcium Iron Oxide; (AL2CA4FE2010)(Tetra-Calcium-Alumino-Ferrite)	12068-35-8	N/K (FP N)	N/K (FP N)	N/K (FP N)	5-15	N/A	N/A
Calcium Sulfate	7778-18-9	WS6920000	15 MG/M3	10 MG/M3	2-10	N/A	N/A
Tricalcium Aluminate; (Tri-Calcium Aluminate)	12042-78-3	N/K (FP N)	N/K (FP N)	N/K (FP N)	1-15	N/A	N/A
Natural Calcium Carbonate; (Calcium Carbonate)	1317-65-3	EV9580000	15 MG/M3	10 MG/M3	0-5	N/A	N/A
Magnesium Oxide	1309-48-4	OM3850000	15 MG/M3	10 MG/M3	0-4	N/A	N/A
Calcium Oxide	1305-78-8	EW3100000	5 MG/M3	2 MG/M3	0-2	N/A	N/A
Silica, Crystalline Quartz; (Crystalline Silica)	14808-60-7	VV7330000	See Table Z-3	.1 MG/M3	0-2	N/A	N/A
Chromates	N/A	N/A	5 MG/M3 (RDUST)	5 MG/M3 (RDUST)	N/K (FP N)	N/A	N/A

### 3. Physical / Chemical Characteristics

**Appearance & Odor:** White Powder; No Odor

**Boiling Point:** >1000C, 1832F

**M.P/F.P Text:** None, Solid

**Vapor Pressure:** Not Measurable

**Vapor Density:** Sup Dat

**Spec Gravity:** 3.2

**PH:** 12-13 (In Water)

**Viscosity:** None, Solid

**Evap Rate & Reference:** Not Measurable

**Solubility in Water:** Slight (0.1-1.0%)

#### 4. Fire and Explosion Hazard Data

**Extinguishing Media:** Use media suitable for surrounding material (FP N).

**Firefighting Procedures:** Use NIOSH approved SCBA & Full Protective Equipment (FP N). Avoid breathing dust. Treat adjacent material.

**Unusual Fire and Explosion Hazards:** This product is not a fire hazard. Hazardous combustion products: None.

#### 5. Reactivity Data

**Stability Indicator:** Yes

**Stability Condition to avoid:** Product is stable but must be kept dry. Reacts with water forming polymerized silicates and calcium oxide.

**Incompatibility (Materials to Avoid):** Dissolves in hydrofluoric acid producing corrosive silicon tetrafluoride gas. Silicates react with powerful oxidizers such as fluorine, chlorine trifluoride and oxygen difluoride.

**Hazardous Decomposition Products:** None. Powdered solid.

**Hazardous Polymerization Indicator:** No

**Conditions to Avoid Polymerization:** Not relevant

#### 6. Health Hazard Data

**LD50 LC50 Mixture:** None specified by manufacturer.

**Route of Entry Inds:** Inhalation: Yes Skin: Yes Ingestion: Yes

**Carcinogenicity:** NTP? Yes IARC? Yes OSHA? No

**Effects of Exposure: Acute/Chronic:** Inhalation: Breathing dust may cause nose, throat or lung irritation and choking. The described effects depend on the degree of exposure. Prolonged or repeated exposure may cause lung injury including silicosis. This product may contain crystalline silicate. Crystalline silica has been classified by IARC as a known human carcinogen. Some human studies indicate potential for lung cancer from crystalline silica exposure. Risk of injury depends on duration and level of exposure. Long term exposures which result in silicosis may result in additional health effects. (Effects of Overexposure). **Acute/Chronic:** Skin: May cause dry skin, redness, discomfort, irritation or severe burns. May produce allergic reaction potentially associated with hexavalent chromium. Thickening of the skin (scleroderma) may be associated with exposures to high levels of crystalline silica. **Acute/Chronic:** Ingestion: Ingestion of large amounts may cause intestinal distress.

**Explanation of Carcinogenicity:** Silica, Crystalline Quartz: IARC Monographs, Vol 68, Pg 41, 1997: Group 1. NTP 7<sup>th</sup> Annual Report on Carcinogens, 1994.

**CA Proposition 65:** Proposition 65, Safe Drinking Water and Toxic Enforcement Act of 1986: This product contains chemical(s) known to the state of California to cause cancer / reproductive damage. <0.0003% arsenic compounds (inorganic).

**Medical Conditions Aggravated by Exposure:** Inhalation of dust may aggravate lung conditions such as asthma emphysema, or chronic bronchitis.

**First Aid Procedures:** **Eyes:** Flush with water for at least 15 minutes. Seek medical attention for abrasions. **Ingestion:** Do not induce vomiting, but drink plenty of water. Seek medical attention for discomfort. **Inhalation:** Remove to fresh air. Seek medical attention for discomfort. **Skin:** Wash with soap and water. Use moisturizing creams for irritated skin. Seek medical attention for burns.

#### 7. Precautions for Safe Handling and Disposal

**Steps to be taken in Case Material is Released or Spilled:** General: Wind blown dust may cause the hazards identified in health hazards section. Remove spilled material to limit potential harm. Land/Water Spill: Clean up spilled material.

**Waste Disposal Method:** Dispose of in an approved landfill. Consult Federal, State, Local or Provincial Authorities for more restrictive requirements.

**Precautions to be taken in Handling and Storage:** General: Avoid accidental release. Store dry and away from water. Storage temp: Unlimited. Empty containers: Dispose of in approved landfill or incinerator.

**Other Precautions:** None specified by manufacturer.

## 8. Control Measures

**Respiratory Protection:** Not normally required. Use NIOSH approved particulate respirator if conditions warrant.

**Ventilation:** Use exhaust ventilation to maintain dust levels below exposure limits in workplaces with poor ventilation and dusty conditions.

**Protective Gloves:** Impervious gloves (FP N).

**Eye Protection:** ANSI approved chemical workers goggles (FP N).

**Other Protective Equipment:** Eye wash fountain and deluge shower which meet ANSI design criteria (FP N). Use shoes and protective clothing to prevent skin contact.

**Work / Hygienic Practices:** None specified by manufacturer.

**NOTE:** The above information is based on current formulation and information available at this time. Since conditions of use are outside our control we make no warranties, expressed or implied, and assume no responsibility or liability in connection with any use of this information.