



## MATERIAL SAFETY DATA SHEET

March 14, 2011

### SECTION 1

### CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: **Phoenix Natural Pozzolan / ASTM Class N**

Manufacturer's Name and Address:

Salt River Materials Group  
Phoenix Cement Company  
8800 E. Chaparral Rd. Suite 155  
Scottsdale, AZ 85250-2606

**24-Hour Emergency Telephone:** CHEMTREC: 1-800-424-9300

Customer Service: Phone: (480) 850-5757 Fax: (480) 850-4333

Chemical Name: Mixture

Chemical Formula: Complex mixture of inorganic materials including metals and silica

### SECTION 2

### COMPOSITION/INFORMATION ON INGREDIENTS

**Ingredients:** Pozzolan Type N – SiO<sub>2</sub>, AlO<sub>3</sub>, Fe<sub>2</sub>O<sub>3</sub>  
Chemical Additives – N/A

<b>SECTION 3</b>	<b>HAZARD IDENTIFICATION</b>
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**POTENTIAL HEALTH EFFECTS****Relevant Routes of Exposure:**

Eye contact, skin contact, inhalation, ingestion

**Inhalation:**

Can irritate respiratory tract; long term exposure to respirable silica above the Occupational Exposure Limit (OEL) may produce silicosis in susceptible persons. See below.

<b>Hazardous Component</b> <i>(Specific chemical Identity, Common Name(s))</i>	<b>OSHA PEL</b>	<b>ACGIH TLV</b>	<b>Other Limits Recommended</b>
Silica, Amorphous (SiO <sub>2</sub> ) CAS 7631-86-9	80 mg/m <sup>3</sup> / %SiO <sub>2</sub> (total dust)	10 mg/m <sup>3</sup> (total dust)	NIOSH: 6 mg/m <sup>3</sup>
Silica, Crystalline (SiO <sub>2</sub> ) CAS 148-086-97	30 mg/m <sup>3</sup> / (%SiO <sub>2</sub> )+2 (total dust) 10 mg/m <sup>3</sup> / (%SiO <sub>2</sub> )+2 (resp. dust)	0.1 mg/m <sup>3</sup> (resp. dust)	0.05 mg/m <sup>3</sup>

**Ingestion:**

Possible, but very unlikely to occur in sufficient quantities

**Eyes:**

Can irritate eyes

**Skin:**

Can dry and irritate skin; is not absorbed by skin

**Signs and symptoms of exposure:**

Irritation of eyes, skin, and respiratory system

**Acute:**

May cause irritation to the respiratory tract, eyes, or skin; alkaline material – irritation may be aggravated by the addition of moisture (sweat)

**Chronic:**

Prolonged inhalation exposure may cause pulmonary fibrosis or chronic bronchitis

**Carcinogenic potential:**

Natural Pozzolan is not a listed carcinogen. Respirable crystalline silica from occupational sources is listed as carcinogenic to human by IARC. NTP listed silica, crystalline (respirable) as a compound that

may reasonably be anticipated to be a carcinogen. Presence of crystalline silica in respirable dust has not been established in this source.

**Medical conditions which may be aggravated by exposure:**

May aggravate existing pulmonary condition if high dust situation is created; dusting conditions should not occur under normal use.

<b>SECTION 4</b>	<b>FIRST AID MEASURES</b>
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**Eyes:**

Immediately flush eyes with a directed stream of water for at least 15 minutes, forcibly holding eyelids apart to ensure complete irrigation of all eyes and lid tissue. Washing eyes within several seconds is essential to achieve maximum effectiveness. If symptoms persist, get medical attention.

**Skin:**

Immediately flush contaminated areas with water. Remove contaminated clothing and footwear. Wash contaminated areas with plenty of soap and water. Wash clothing before reuse. Discard footwear that cannot be decontaminated. If irritation or rash persist or worsens seek medical attention.

**Inhalation:**

Remove to fresh air if safe to transport. Otherwise, attempt to provide fresh air by ventilation. If breathing is difficult, have trained person administer oxygen. If respiration or pulse has stopped, have a trained person administer basic life support (cardio-pulmonary resuscitation/automatic external defibrillator) and call for emergency services immediately.

**Ingestion:**

Never give anything by mouth to an unconscious person. If swallowed, do not induce vomiting. Give large quantities of water. If vomiting occurs spontaneously, keep airway clear and give more water. If symptoms persist get medical attention.

<b>SECTION 5</b>	<b>FIRE FIGHTING MEASURES</b>
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**Flash point [provided method used]:**

None

Upper Explosion Limit: N/A

Lower Explosion Limit: N/A

**Auto ignition temperature:** N/A

**Extinguishing media:**

No special Media

**Fire fighting procedures:**

Evacuate all unnecessary personnel. Shut down motors, pumps, electrical service and eliminate all sources of ignition. Use water spray if appropriate or appropriate extinguishing media for fires where water is not appropriate. Wear NIOSH/MSHA approved positive pressure self-contained breathing apparatus and full protective clothing.

**Special fire fighting procedures:**

No special procedures

**Water reactive:** N/A

**Unusual fire and explosion hazards:** None. This material is considered non-flammable and non-combustible. Use fire extinguishing agent suitable for surrounding media.

<b>SECTION 6</b>	<b>ACCIDENTAL RELEASE MEASURES</b>
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**Personal Precautions:**

People performing the cleanup should have personal protective equipment sufficient to keep material away from skin and to prevent inhalation.

**Environmental Precautions and Methods for Clean Up:**

Clean up material for use or disposal. Dampen with water mist to control dust (airborne dust) before removal. Do not use compressed air to move material. If loaded on trucks, wet down ash to prevent dusting during transport. Avoid discharge into storm waters, sewer drains, and other waterways.

<b>SECTION 7</b>	<b>HANDLING AND STORAGE</b>
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**Handling:**

Avoid breathing dust, use with adequate ventilation. In dusty environments (greater than the PEL/TLV) wear NIOSH/MSHA approved respiratory protection and tight fitting goggles. Local exhaust can be used, if necessary, to control airborne dust levels. Avoid actions that may generate dust. Do not get into eyes, on skin or clothing. Wash thoroughly after handling material. When handling moist or wet product skin protection is required. Impervious boots or shoes covering should be used if material is anticipated to contact feet.

**Storage:**

Store in cool, dry, ventilated area away from ignition sources (sparks and flame)

<b>SECTION 8</b>	<b>EXPOSURE CONTROL / PERSONAL PROTECTION</b>
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**Engineering Controls:**

Use general local exhaust ventilation and dust collection systems to keep dust level within acceptable limits.

**PERSONAL PROTECTION**

**Respiratory:**

If airborne levels are expected to exceed the PEL/TLV use a NIOSH/MSHA approved respirator.

**Eye/Face:**

Use safety goggles for face shield in dusty operations. Avoid contact lenses

**Skin:**

Normal work gloves to prevent excessive contact with skin. On regular basis, wash work clothes.

**Other:**

Recommend coveralls in high concentrated conditions. Wet-wash areas periodically to minimize dust.

<b>SECTION 9</b>	<b>PHYSICAL AND CHEMICAL PROPERTIES</b>
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**Appearance:**

Light to dark gray, tan or charcoal colored

**Odor:**

No distinctive odor

**Physical State:**

Powder of varying textures

**Specific Gravity (H<sub>2</sub>O = 1.0):**

1.8 to 2.7

**Vapor Density:**

Not applicable

**Vapor Pressure:**

Not applicable

**Evaporating Rate:**

Not applicable

**Boiling Point:**

>2000°F

**Melting Point:**

>1400°F

**Solubility in Water (% by weight):**

0.5%

**pH (in water):**

9 - 11

<b>SECTION 10</b>	<b>STABILITY AND REACTIVITY</b>
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**Stability:**

Stable

**Incompatibility:**

None known

**Hazardous Polymeration:**

Not known to occur

**Hazardous Decomposition:**

Not known to occur and not suspected under normal conditions

**Conditions to Avoid:**

Any condition that may generate excessive dust

**HMIS Hazard Ratings:**

Health Hazard: 1

Fire Hazard: 0

Reactivity: 0

<b>SECTION 11</b>	<b>TOXICOLOGICAL INFORMATION</b>
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**Acute or short-term:**

This product is expected to cause irritation of the eyes, skin and mucous membranes. Product may cause sneezing and coughing if inhaled. Swallowing this product may produce gastrointestinal discomfort. Inhalation of this product may produce irritation of the upper respiratory tract and asthma-like responses in some individuals.

**Chronic or long-term:**

This product contains crystalline silica, which upon long-term exposure to levels above the PEL/TLV may produce bronchitis, silicosis, a fibrotic (scarring) disease of the lungs and potentially lung cancer. Studies have shown that smoking increases the risk of these diseases. This product may also increase the risk of scleroderma for which the causes are unknown, but some reports link over exposure to silica in combination with other chemicals to this disease.

<b>SECTION 12</b>	<b>ECOLOGICAL INFORMATION</b>
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**Ecotoxicity:**

No data available. This material is believed to be non-toxic to aquatic life.

**Persistence:**

No data available. This material is believed to be unlikely to persist in the environment.

**Bioaccumulation:**

No data available. This material is believed unlikely to bioaccumulate.

<b>SECTION 13</b>	<b>DISPOSAL CONSIDERATIONS</b>
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This product is not classified as a hazardous waste under RCRA or CERCLA. The material may be land filled; however, material should be covered to minimize generation of airborne dust. Ensure that all federal, state and local regulations are followed.

**DISCLAIMER:** Users are advised to make their own determinations as to the suitability of the information in this data sheet in relation to their particular purposes and specific circumstances. Each user should read the data sheet and consider the information in the context of how the product will be handled and used in the workplace and in conjunction with other substances or products. Individual responsibility must be taken as to proper use and handling of the product. The manufacturer makes no warranty expressed or implied regarding the accuracy of the information in this data sheet or the results to be obtained in the use of the product.

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