SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

Product Names: Navajo Brand®, PFM

Synonym/s: Pumice, Volcanic Glass

Manufacturer: CR Minerals
P.O. Box 708
Ohkay Owingeh, NM 87566
505-428-2940

Emergency Phone: Chemtrec 1-800-424-9300

Chemical Name: Pumice (Amorphous Metal silicates)
Chemical Family: 
Chemical Formula: M_xO_y.SiO_2 (M=Al, Ca, Mg + other minor metal oxides bound with SiO2)

Product Use/s: Abrasive, Filter Media, Light weight aggregate, Pozzolan

Prepared By: CR Minerals

SECTION 2: COMPOSITION / INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>CAS</th>
<th>OSHA PEL, TWA 8/40h (mg/m^3)</th>
<th>ACGIH TLV, TWA 8/40h (mg/m^3)</th>
<th>NIOSH REL, TWA 8/40h (mg/m^3)</th>
<th>NIOSH IDLH (mg/m^3)</th>
<th>Conc. (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pumice (Amorphous metal silicates)</td>
<td>1332-09-8</td>
<td>15 (total dust) 5 (respirable)</td>
<td>10 (total dust) 5 (respirable)</td>
<td>10 (total dust) 5 (respirable)</td>
<td>N.A.</td>
<td>&gt; 90</td>
</tr>
<tr>
<td>Crystalline Silica, SiO_2 (Quartz)</td>
<td>14808-60-7</td>
<td>0.025 (respirable)</td>
<td>0.05 (respirable)</td>
<td>50</td>
<td>&lt; 5%</td>
<td></td>
</tr>
</tbody>
</table>

OSHA Regulatory Status: This material is subject to 29 CFR 1910.1200 (Hazard Communication).

SECTION 3: HAZARDS IDENTIFICATION

Emergency Overview: Pumice is an odorless white or grayish-white material that ranges from pebble to a granular powder. Contact can cause irritation to eyes, skin, respiratory system, and gastrointestinal tract.

Potential Health Effects

- **Eyes**: Contact can cause irritation of eyes.
- **Skin**: Contact can cause mild irritation of skin.
- **Ingestion**: This product can cause mild irritation of gastrointestinal tract if swallowed.
- **Inhalation**: This product can cause mild irritation of the respiratory system. Long-term exposure may cause permanent damage. Pumice is not listed by MSHA, OSHA, or IARC as a carcinogen. However, this product may contain trace amounts of crystalline silica in the form of quartz or cristobalite, which has been classified by IARC as a Group I carcinogen to humans when inhaled. Inhalation of silica can also cause a chronic lung disorder, silicosis.

Medical Conditions Aggravated by Exposure: Contact may aggravate disorders of the eyes, skin, gastrointestinal tract, and respiratory system.

Potential Environmental Effects: Pumice is an inert material.
**SECTION 4: FIRST AID MEASURES**

**Eyes:** Immediately flush eyes with generous amounts of water or eye wash solution if water is unavailable. Pull back eyelid while flushing to ensure that all dust has been washed out. Seek medical attention promptly if the initial flushing of the eyes does not remove the irritant. Do not rub eyes.

**Skin:** Brush off or remove as much dry dust as possible. Wash exposed area with large amounts of water. If irritation persists, seek medical attention promptly.

**Inhalation:** Move victim to fresh air. Seek medical attention. If breathing has stopped, give artificial respiration.

**Ingestion:** Do not induce vomiting. Seek medical attention immediately. Never give anything by mouth unless instructed to do so by medical personnel.

**SECTION 5: FIRE FIGHTING MEASURES**

**Fire Hazards:** Pumice is not combustible or flammable. This product is not considered to be an explosion hazard.

**Hazardous Combustion Products:** None

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

**Fire Fighting Instructions:** Keep personnel away from and upwind of fire. Avoid skin contact or inhalation of dust. Wear full fire-fighting turn-out gear (full Bunker gear), and respiratory protection (SCBA).

**SECTION 6: ACCIDENTAL RELEASE MEASURES**

**Spill / Leak Procedures:** Use proper protective equipment.

**Small Spills:** Use dry methods to collect spilled materials. Avoid generating dust. Do not clean up with compressed air. Store collected materials in dry, sealed plastic or non-aluminum metal containers. Residue on surfaces may be water washed.

**Large Spills:** Use dry methods to collect spilled materials. Evacuate area downwind of clean-up operations to minimize dust exposure. Store spilled materials in dry, sealed plastic or non-aluminum metal containers.

**Containment:** Minimize dust generation and prevent bulk release to sewers or waterways.

**Clean-up:** Residual amounts of material can be flushed with large amounts of water. Equipment can be washed with either a mild vinegar and water solution, or detergent and water.

**SECTION 7: HANDLING AND STORAGE**

**Handling:** Avoid forming dust. Keep in tightly closed plastic or metal containers. Protect container from physical damage. Avoid direct skin contact with the material.

**Storage:** Store in a cool, dry, and well-ventilated location.

**SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION**

**Engineering Controls:** Provide ventilation adequate to maintain PELs.

**Respiratory Protection:** Use NIOSH/MSHA approved respirators if airborne concentration exceeds PELs.

**Skin Protection:** Use appropriate gloves and footwear to prevent skin contact and the potential for irritation. Clothing should fully cover arms and legs.

**Eye Protection:** Use safety glasses with side shields or safety goggles. Contact lenses should not be worn when working in a dusty environment.

**Other:** Eye wash fountain/stations and emergency showers should be available.
### SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>White or grayish-white lumps or powder</td>
</tr>
<tr>
<td>Odor</td>
<td>Odorless</td>
</tr>
<tr>
<td>Physical State</td>
<td>Solid</td>
</tr>
<tr>
<td>Boiling Point (°C/°F)</td>
<td>N.A.</td>
</tr>
<tr>
<td>Melting Point (°C/°F)</td>
<td>N.A.</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>2.4</td>
</tr>
<tr>
<td>Vapor Pressure (mm Hg)</td>
<td>N.A.</td>
</tr>
<tr>
<td>Vapor Density</td>
<td>N.A.</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>N.A.</td>
</tr>
<tr>
<td>Solubility in Water</td>
<td>Negligible solubility in water</td>
</tr>
<tr>
<td>pH (25°C/77°F)</td>
<td>8 - 10</td>
</tr>
</tbody>
</table>

### SECTION 10: STABILITY AND REACTIVITY

<table>
<thead>
<tr>
<th>Stability</th>
<th>Chemically stable.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Incompatibility/</td>
<td></td>
</tr>
<tr>
<td>Conditions to Avoid:</td>
<td>Pumice should not be mixed or stored with the following materials, due to the potential for vigorous reaction and release of heat:</td>
</tr>
<tr>
<td>Hydrofluoric Acid</td>
<td></td>
</tr>
<tr>
<td>Hazardous</td>
<td>None</td>
</tr>
<tr>
<td>Decomposition</td>
<td>None</td>
</tr>
<tr>
<td>Products:</td>
<td></td>
</tr>
<tr>
<td>Hazardous</td>
<td>None</td>
</tr>
<tr>
<td>Polymerization</td>
<td>None</td>
</tr>
</tbody>
</table>

### SECTION 11: TOXICOLOGICAL INFORMATION

An LD50 of 6450mg/kg (Rat, oral) has been identified for this product. Pumice is not listed by MSHA, OSHA, or IARC as a carcinogen, but this product may contain crystalline silica, which has been classified by IARC as carcinogenic to humans when inhaled in the form of quartz or crystobalite.

### SECTION 12: ECOLOGICAL INFORMATION

<table>
<thead>
<tr>
<th>Ecotoxicity</th>
<th>Because of its unreactive nature, it would not be expected to produce ecotoxicity upon exposure to aquatic organisms and aquatic systems.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environmental Fate</td>
<td>This material shows no bioaccumulation effect or food chain concentration toxicity.</td>
</tr>
</tbody>
</table>

### SECTION 13: DISPOSAL CONSIDERATIONS

Dispose of in accordance with all applicable federal, state, and local environmental regulations. If this product as supplied, and unmixed, becomes a waste, it will not meet the criteria of a hazardous waste as defined under the U.S. Resource Conservation and Recovery Act (RCRA).
**SECTION 14: TRANSPORTATION INFORMATION**

Pumice is not classified as a hazardous material by US DOT and is not regulated by the Transportation of Dangerous Goods (TDG) when shipped by any mode of transport.

**SECTION 15: REGULATORY INFORMATION**

**U.S. EPA Regulations:**
- RCRA Hazardous Waste Number (40 CFR 261.33): not listed
- RCRA Hazardous Waste Classification (40 CFR 261): not classified
- CERCLA Hazardous Substance (40 CFR 302.4) unlisted specific per RCRA, Sec. 3001; CWA, Sec. 311(b)(4); CWA, Sec. 307(a), CAA, Sec. 112
- CERCLA Reportable Quantity (RQ): not listed
- SARA 311/312 Codes: not listed
- SARA Toxic Chemical (40 CFR 372.65): not listed
- SARA EHS (Extremely Hazardous Substance) (40 CFR 355): not listed, Threshold Planning Quantity (TPQ): not listed

All chemical ingredients are listed on the USEPA TSCA Inventory List.

**OSHA/MSHA Regulations:**
- Air Contaminant (29 CRF 1910.1000, Table Z-1, Z-1-A): 5mg/M³ TWA-8
- MSHA: not listed
- OSHA Specifically Regulated Substance (29 CFR 1910): not listed

**State Regulations:**
Consult state and local authorities for guidance. Components found in this product may contain trace amounts of inherent naturally occurring elements (such as, but not limited to arsenic and cadmium) that may be regulated.
- California Proposition 65 lists respirable crystalline silica (10 microns) as a carcinogen.
- This product may contain respirable crystalline silica

**Canada:**
- WHMIS Classification: "D2A" Materials Causing Other Toxic Effects
- Canada NDSL: Listed

**NFPA Hazard Class:**
- Health: 1 Flammability: 0 Reactivity: 0

**HMIS Hazard Class:**
- Health: 1 Flammability: 0 Reactivity: 0 Specific Hazard:

**SECTION 16: OTHER INFORMATION**

Prepared By: CR Minerals: June 2010

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