Section 1. Identification

Product Name: BD Grout (C-Side)
Bridge Preservation, LLC
686 S. Adams Street
Kansas City, KS 66105
913.912.3305

Spill, leak, fire, exposure, or accident, call CHEMTREC day or night
Domestic North America 800.424.9300
International 703.527.3887
e-mail: ehs@versaflex.com

Section 2. Hazards Identification

Emergency Overview: High airborne levels of dust may cause irritation to eyes and upper respiratory tract.

GHS Ratings:

<table>
<thead>
<tr>
<th>Hazard Category</th>
<th>Rating</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skin corrosive</td>
<td>2</td>
<td>Reversible adverse effects in dermal tissue, Draize score: &gt;= 2.3 &lt; 4.0 or persistent inflammation</td>
</tr>
<tr>
<td>Eye corrosive</td>
<td>2A</td>
<td>Eye irritant: Subcategory 2A, Reversible in 21 days</td>
</tr>
<tr>
<td>Carcinogen</td>
<td>1A</td>
<td>Known Human Carcinogen Based on human evidence</td>
</tr>
<tr>
<td>Organ toxin single exposure</td>
<td>3</td>
<td>Transient target organ effects- Narcotic effects- Respiratory tract irritation</td>
</tr>
</tbody>
</table>
| Organ toxin repeated exposure           | 1      | Significant toxicity in humans- Reliable, good quality human case studies or epidemiological studies
                                          | presumed significant toxicity in humans- Animal studies with significant and/or severe toxic effects relevant to humans at generally low exposure (guidance) |

GHS Hazards

H315 Causes skin irritation
H319 Causes serious eye irritation
H335 May cause respiratory irritation
H350 May cause cancer
H372 Causes damage to organs through prolonged or repeated exposure

GHS Precautions

P201 Obtain special instructions before use
P202 Do not handle until all safety precautions have been read and understood
P260 Do not breathe dust/fume/gas/mist/vapours/spray
P261 Avoid breathing dust/fume/gas/mist/vapours/spray
P264 Wash exposed skin thoroughly after handling
P270 Do not eat, drink or smoke when using this product
P271 Use only outdoors or in a well-ventilated area
P280 Wear protective gloves/protective clothing/eye protection/face protection
<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>P281</td>
<td>Use personal protective equipment as required</td>
</tr>
<tr>
<td>P312</td>
<td>Call a POISON CENTER or doctor/physician if you feel unwell</td>
</tr>
<tr>
<td>P314</td>
<td>Get Medical advice/attention if you feel unwell</td>
</tr>
<tr>
<td>P321</td>
<td>Specific treatment (as detailed on this label)</td>
</tr>
<tr>
<td>P362</td>
<td>Take off contaminated clothing and wash before reuse</td>
</tr>
<tr>
<td>P302+P352</td>
<td>IF ON SKIN: Wash with soap and water</td>
</tr>
<tr>
<td>P304+P340</td>
<td>IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing</td>
</tr>
<tr>
<td>P305+P351+P338</td>
<td>IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do - continue rinsing</td>
</tr>
<tr>
<td>P308+P313</td>
<td>IF exposed or concerned: Get medical advice/attention</td>
</tr>
<tr>
<td>P332+P313</td>
<td>If skin irritation occurs: Get medical advice/attention</td>
</tr>
<tr>
<td>P337+P313</td>
<td>Get medical advice/attention</td>
</tr>
<tr>
<td>P405</td>
<td>Store locked up</td>
</tr>
<tr>
<td>P403+P233</td>
<td>Store in a well ventilated place. Keep container tightly closed</td>
</tr>
<tr>
<td>P501</td>
<td>Dispose of contents/container in accordance with applicable regional, national and local laws and regulations.</td>
</tr>
</tbody>
</table>

**Danger**

**Acute Health Effects:**

Excessive exposure to high concentrations of dust may cause irritation to the eyes, skin and mucous membranes of the upper respiratory tracts.

**Inhalation:** Can irritate respiratory system. Avoid breathing dust.

**Eye:** Dusts may cause irritation to the eye. Scratching of cornea can occur if eye is rubbed.

**Ingestion:** Ingestion of harmful amounts of this product as distributed is unlikely due to its solid insoluble form. Ingestion of excessive amounts of dust may cause nausea and vomiting.

**Chronic Health Effects:** Chronic inhalation of respirable crystalline silica may cause silicosis; a fibrosis (scarring) of the lungs. Silicosis may be progressive; it may lead to disability and death. Crystalline silica inhaled from occupational sources is classified as carcinogenic to humans.
### Section 3. Composites/Information on Ingredients

<table>
<thead>
<tr>
<th>Chemical Name / CAS No.</th>
<th>OSHA Exposure Limits</th>
<th>ACGIH Exposure Limits</th>
<th>Other Exposure Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quartz 14808-60-7 80 to 90%</td>
<td>PELs - (30)/(%SiO2 + 2) mg/m3 TWA, total dust PELs - (250)/(%SiO2 + 5) mppcf TWA, respirable fraction PELs - (10)/(%SiO2 + 2) mg/m3 TWA, respirable fraction</td>
<td>TLV - 0.025 mg/m3 TWA (respirable fraction)</td>
<td></td>
</tr>
<tr>
<td>Glass, oxide, chemicals 65997-17-3 10 to 20%</td>
<td>OELs not established</td>
<td>OELs not established</td>
<td></td>
</tr>
</tbody>
</table>

### Section 4. First-aid Measures

Move exposed person to fresh air. If breathing is labored, oxygen should be administered by qualified personnel. Consult a physician if necessary.

In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. If irritation persists, get medical attention.

After contact with skin, wash soap and water. If irritation persists, consult a physician.

Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Provided the patient is conscious, wash out mouth with water. Dilute by drinking large quantities of water. Get medical attention if discomfort persists.

### Section 5. Fire-fighting Measures

This material is not flammable, combustible or explosive.

### Section 6. Accidental Release Measures

Clean up using dustless methods to minimize generation and distribution of respirable particles.

Avoid using compressed air. Avoid material entering sewers, drains or surface waters.

### Section 7. Handling and Storage

Put on appropriate personal protective equipment (see Section 8).

Handle the product in accordance with good industrial hygiene and safety practices. Do not breathe dust. Use proper work practices and adequate ventilation with dust collection to maintain airborne levels of crystalline silica to below PEL. Wear appropriate respirator when ventilation is inadequate. Material is to be stored in accordance with local regulations. Store in original container protected from moisture, keeping material in a dry and well-ventilated area. Keep container tightly closed and sealed until ready for use.

Do not store in unlabeled containers.

Use appropriate containment to avoid environmental contamination.
Section 8. Exposure Controls/Personal Protection

### Chemical Name / CAS No. | OSHA Exposure Limits | ACGIH Exposure Limits | Other Exposure Limits
--- | --- | --- | ---
Quartz 14808-60-7 | PELs - (30)/(%SiO2 + 2) mg/m3 TWA, total dust  
PELs - (250)/(%SiO2 + 5) mppcf TWA, respirable  
fraction PELs - (10)/(%SiO2 + 2) mg/m3 TWA, respirable  
fraction | TLV - 0.025 mg/m3 TWA (respirable fraction) |  
Glass, oxide, chemicals 65997-17-3 | OELs not established | OELs not established |  

**Engineering Controls:** Use adequate ventilation to reduce the level of respirable crystalline silica to below the PEL.

**Ventilation:** Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

**Protective Gear:** In case of inadequate ventilation, wear respiratory protection. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Good personal hygiene practices should be followed to include cleansing of exposed skin with soap and water and laundering work clothing.

Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists or dusts.

Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Section 9. Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Appearance: As color specified</th>
<th>Odor: Not applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vapor Pressure: No Data</td>
<td>Odor threshold: No Data</td>
</tr>
<tr>
<td>pH: No Data</td>
<td>Melting point: No Data</td>
</tr>
<tr>
<td>Freezing point: No Data</td>
<td>Flash point: Not applicable</td>
</tr>
<tr>
<td>Evaporation rate: No Data</td>
<td>Flammability: No Data</td>
</tr>
<tr>
<td>Explosive Limits: No Data</td>
<td>Vapor pressure: No Data</td>
</tr>
<tr>
<td>Vapor Density: No Data</td>
<td>Specific Gravity 2.65</td>
</tr>
<tr>
<td>Solubility: No Data</td>
<td>Partition coefficient (n-octanol/water):</td>
</tr>
<tr>
<td>Boiling range: No Data</td>
<td>Autoignition temperature: No Data</td>
</tr>
<tr>
<td>Decomposition temperature: No Data</td>
<td>Viscosity: N/A</td>
</tr>
<tr>
<td>% Weight Volatile (VOC) 0.00</td>
<td></td>
</tr>
</tbody>
</table>


**Section 10. Stability and Reactivity**

**Chemical Stability:** Stable at room temperature. No specific test data related to reactivity is available for this product or its ingredients.

**Hazardous reactions:** None known. Stable under normal conditions.

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

**Hazardous Decomposition Products:** Crystalline silica will dissolve in hydrofluoric acid and produce a corrosive gas (silicon tetrafluoride).

**Section 11. Toxicological Information**

**Silicosis:** The major concern is silicosis, caused by inhalation and retention of respirable crystalline silica dust. Silicosis can exist in several forms, chronic (or ordinary), accelerated, or acute.

**Chronic or Ordinary Silicosis (often referred to as Simple Silicosis)** is the most common form of silicosis and can occur after many years of exposure to relatively low concentrations of airborne respirable crystalline silica dust.

**Accelerated Silicosis** can occur with exposure to high concentrations of respirable crystalline silica over a shorter period.

**Acute Silicosis** can occur with exposures to very high concentrations of respirable crystalline silica over a very short period, sometimes as short as a few months. The symptoms of acute silicosis include progressive shortness of breath, fever, cough, weight loss. Acute silicosis can be fatal.

**Autoimmune Diseases:** Several studies have reported cases of several autoimmune disorders such as scleroderma, systemic lupus and rheumatoid arthritis among silica exposed workers.

**Tuberculosis:** Individuals with silicosis are at increased risk to develop pulmonary tuberculosis, if exposed to persons with tuberculosis.

**Kidney Disease:** Several studies have reported excess cases of kidney diseases, including end stage renal disease, among silica-exposed workers.

**Routes of Entry**

- Inhalation
- Ingestion

**Target Organs**

- Respiratory System

**Effects of Overexposure**

- Harmful if inhaled

**Carcinogenicity**

<table>
<thead>
<tr>
<th>CAS Number</th>
<th>Description</th>
<th>% Weight</th>
<th>Carcinogen Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>14808-60-7</td>
<td>Quartz</td>
<td>80 to 90%</td>
<td>Quartz:</td>
</tr>
</tbody>
</table>

**Section 12. Ecological Information**

Only component information is listed, if any. No testing has been performed on this mixture as it relates to ecological impact.

**Component Ecotoxicity**
Section 13. Disposal Considerations

The generation of waste should be avoided or minimized by using excess product in an alternate, beneficial application wherever possible.

Empty containers may retain some product residues. This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilled material, runoff and contact with soil, waterways, drains and sewers.

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Section 14. Transport Information

This information is not intended to convey all specific regulatory or operational requirements/information relating to this product. Transportation classifications may vary by container volume and may be influenced by regional or country variations in regulations. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material.

<table>
<thead>
<tr>
<th>Agency</th>
<th>Proper Shipping Name</th>
<th>UN Number</th>
<th>Packing Group</th>
<th>Hazard Class</th>
</tr>
</thead>
<tbody>
<tr>
<td>DOT</td>
<td>Not Regulated</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IATA</td>
<td>Not Regulated</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IMDG</td>
<td>Not Regulated</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Section 15. Regulatory Information

THIS PRODUCT CONTAINS A CHEMICAL(S) KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER.

WHMIS Symbol(s)

All components of this product are on the TSCA Inventory or are exempt from TSCA Inventory requirements under 40 CFR 720.30, unless listed below:
- None

This product contains the following substance(s), which are subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and which are listed in 40 CFR 372:
- None

Section 16. Other Information

The customer is responsible for determining the proper PPE code for this material within their respective process.
Notice to reader:
While the information and recommendations in this publication are to the best of our knowledge, information and belief accurate at the date of publication, NOTHING HEREIN IS TO BE CONSTRUED AS A WARRANTY, EXPRESS OR OTHERWISE.

IN ALL CASES, IT IS THE RESPONSIBILITY OF THE USER TO DETERMINE THE APPLICABILITY OF SUCH INFORMATION AND RECOMMENDATIONS AND THE SUITABILITY OF ANY PRODUCT FOR ITS OWN PARTICULAR PURPOSE.

THE PRODUCT MAY PRESENT HAZARDS AND SHOULD BE USED WITH CAUTION. WHILE CERTAIN HAZARDS ARE DESCRIBED IN THIS PUBLICATION, NO GUARANTEE IS MADE THAT THESE ARE THE ONLY HAZARDS THAT EXIST.

Hazards, toxicity and behavior of the products may differ when used with other materials and are dependent upon the manufacturing circumstances or other processes. Such hazards, toxicity and behavior should be determined by the user and made known to handlers, processors and end users.