**SECTION 1: Identification**

**1.1. Product identifier**
Product name: Penetron Admix®, Penetron Admix® SB
Product code: Not available.

**1.2. Relevant identified uses of the substance or mixture and uses advised against**
Use of the substance/mixture: Concrete protection and permeability reduction

**1.3. Details of the supplier of the safety data sheet**
Penetron International, Ltd.
45 Research Way, Suite 203
East Setauket, New York 11733 – USA
T +1 (631) 941-9700
info@penetron.com - penetron.com

**1.4. Emergency telephone number**
Emergency number: CHEMTREC: US and Canada: 1-800-424-9300; International +1 703-527-3887

**SECTION 2: Hazards identification**

**2.1. Classification of the substance or mixture**
*Classification (GHS-US)*
- Skin Irritation 2
- Serious Eye Damage 1

**2.2. Label elements**
*GHS-US labeling*
- Hazard pictograms (GHS-US):

**2.3. Other hazards**
No additional information available.

**2.4. Unknown acute toxicity (GHS US)**
Not applicable.

**SECTION 3: Composition/information on ingredients**

**3.1. Substance**
Not applicable.

**3.2. Mixture**

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cement, portland, chemicals</td>
<td>(CAS No) 65997-15-1</td>
<td>65 - 80</td>
</tr>
<tr>
<td>CTS-15-1</td>
<td>Trade Secret</td>
<td>10 - 30</td>
</tr>
<tr>
<td>CTS-15-2</td>
<td>Trade Secret</td>
<td>5 - 10</td>
</tr>
<tr>
<td>Calcium magnesium hydroxide (CaMg(OH)4)</td>
<td>(CAS No) 39445-23-3</td>
<td>1.5 - 6</td>
</tr>
<tr>
<td>Calcium magnesium hydroxide oxide (CaMg(OH)2O)</td>
<td>(CAS No) 58398-71-3</td>
<td>1.5 - 6</td>
</tr>
<tr>
<td>Calcium hydroxide</td>
<td>(CAS No) 1305-62-0</td>
<td>1.0 - 2</td>
</tr>
</tbody>
</table>

* The exact percentage (concentration) of composition has been withheld as a trade secret in accordance with paragraph (i) of §1910.1200.
SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures after inhalation: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention if you feel unwell.

First-aid measures after skin contact: In case of contact, immediately flush skin with plenty of water. Wash clothing before reuse. Call a physician if irritation develops and persists.

First-aid measures after eye contact: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. If easy to do, remove contact lenses, if worn. Get medical attention immediately.

First-aid measures after ingestion: If swallowed, do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical advice/attention if you feel unwell.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries after inhalation: May cause respiratory tract irritation. May cause burns in the presence of moisture.

Symptoms/injuries after skin contact: Causes skin irritation. Symptoms may include redness, edema, drying, defatting and cracking of the skin. May cause burns in the presence of moisture.

Symptoms/injuries after eye contact: Causes serious eye damage. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva. May cause burns.

Symptoms/injuries after ingestion: May be harmful if swallowed. May cause stomach distress, nausea or vomiting. May cause burns in the presence of moisture.

4.3. Indication of any immediate medical attention and special treatment needed

Symptoms may not appear immediately. In case of accident or if you feel unwell, seek medical advice immediately (show the label or SDS where possible).

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media: Treat for surrounding material.

Unsuitable extinguishing media: None known.

5.2. Special hazards arising from the substance or mixture

Fire hazard: Products of combustion may include, and are not limited to: oxides of carbon.

5.3. Advice for firefighters

Protection during firefighting: Keep upwind of fire. Wear full fire fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA).

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures: Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel.

6.2. Methods and material for containment and cleaning up

For containment: Contain and/or absorb spill with inert material (e.g. sand, vermiculite), then place in a suitable container. Do not flush to sewer or allow to enter waterways. Use appropriate Personal Protective Equipment (PPE).

Methods for cleaning up: Vacuum or sweep material and place in a disposal container. Avoid generating dust. Provide ventilation.

6.3. Reference to other sections

See section 8 for further information on protective clothing and equipment and section 13 for advice on waste disposal.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling: Avoid contact with skin and eyes. Do not breathe dust/fume/gas/mist/vapors/spray. Do not swallow. Handle and open container with care. When using do not eat, drink or smoke.

Hygiene measures: Launder contaminated clothing before reuse. Wash hands before eating, drinking, or smoking.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Keep out of the reach of children. Keep container tightly closed. Store in original container in a dry, cool, well-ventilated area. Keep out of direct sunlight. Keep away from food and drink. Store locked up.

7.3. Specific end use(s)

Not available.
SECTION 8: Exposure controls/personal protection

8.1. Control parameters

<table>
<thead>
<tr>
<th>Chemicals</th>
<th>ACGIH</th>
<th>OSHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cement, portland, chemicals (65997-15-1)</td>
<td>ACGIH TWA (mg/m³)</td>
<td>1 mg/m³ (no asbestos and &lt;1% crystalline silica, respirable fraction)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

CTS-15-1

| ACGIH | Not applicable. |
| OSHA | Not applicable. |

CTS-15-2

| ACGIH | Not applicable. |
| OSHA | Not applicable. |

Calcium magnesium hydroxide (CaMg(OH)4) (39445-23-3)

| ACGIH | Not applicable. |
| OSHA | Not applicable. |

Calcium magnesium hydroxide oxide (CaMg(OH)2O) (58398-71-3)

| ACGIH | Not applicable. |
| OSHA | Not applicable. |

Calcium hydroxide (1305-62-0)

| ACGIH | ACGIH TWA (mg/m³) | 5 mg/m³ |
| OSHA | OSHA PEL (TWA) (mg/m³) | 15 mg/m³ (total dust) |
| | | 5 mg/m³ (respirable fraction) |

8.2. Exposure controls

Appropriate engineering controls: Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, etc.) below recommended exposure limits.

Hand protection: Protective gloves made of rubber or PVC.

Eye protection: Wear approved eye (properly fitted dust- or splash-proof chemical safety goggles) / face (face shield) protection.

Skin and body protection: Wear suitable protective clothing.

Respiratory protection: A NIOSH approved dust mask or filtering facepiece is recommended in poorly ventilated areas or when permissible exposure limits may be exceeded. Respirators should be selected by and used under the direction of a trained health and safety professional following requirements found in OSHA's respirator standard (29 CFR 1910.134) and ANSI's standard for respiratory protection (Z88.2).

Environmental exposure controls: Maintain levels below Community environmental protection thresholds.

Other information: Do not eat, smoke or drink where material is handled, processed or stored. Wash hands carefully before eating or smoking. Handle according to established industrial hygiene and safety practices.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: Solid

Appearance: Powder

Color: Gray

Odor: Odorless

Odor threshold: No data available

pH: No data available

pH solution: 10 - 13 (10% solution in water)

Melting point: > 1000 °C (> 1832 °F)

Freezing point: No data available
Boiling point: No data available
Flash point: No data available
Relative evaporation rate (butyl acetate=1): No data available
Flammability (solid, gas): Not flammable
Explosion limits: No data available
Explosive properties: No data available
Oxidizing properties: No data available
Vapor pressure: No data available
Relative density: No data available
Relative vapor density at 20 °C: No data available
Solubility: No data available
Partition coefficient: n-octanol/water: No data available
Auto-ignition temperature: No data available
Decomposition temperature: No data available
Viscosity: No data available
Viscosity, kinematic: No data available
Viscosity, dynamic: No data available

9.2. Other information
No additional information available.

SECTION 10: Stability and reactivity

10.1. Reactivity
No dangerous reaction known under conditions of normal use.

10.2. Chemical stability
Stable under normal storage conditions.

10.3. Possibility of hazardous reactions
No dangerous reaction known under conditions of normal use. Reacts with water to form alkaline solution

10.4. Conditions to avoid

10.5. Incompatible materials
Strong acids.

10.6. Hazardous decomposition products
May include, and are not limited to: oxides of carbon.

SECTION 11: Toxicological information

11.1. Information on toxicological effects
Acute toxicity: Not classified

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<thead>
<tr>
<th>Penetron Admix®</th>
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<tbody>
<tr>
<td>LD50 oral rat</td>
<td>&gt; 2000 mg/kg</td>
</tr>
<tr>
<td>LD50 dermal rabbit</td>
<td>&gt; 2000 mg/kg</td>
</tr>
<tr>
<td>LC50 inhalation rat</td>
<td>No data available</td>
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</table>

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>LD50 oral rat</td>
<td>2800 mg/kg</td>
</tr>
<tr>
<td>LD50 dermal rabbit</td>
<td>&gt; 2000 mg/kg</td>
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<tr>
<td>LC50 inhalation rat</td>
<td>2.3 mg/l/4h</td>
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</table>

<table>
<thead>
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<tbody>
<tr>
<td>LD50 oral rat</td>
<td>9300 mg/kg</td>
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<table>
<thead>
<tr>
<th>Calcium hydroxide (1305-62-0)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50 oral rat</td>
<td>7340 mg/kg</td>
</tr>
</tbody>
</table>

Skin corrosion/irritation: Causes skin irritation.
Serious eye damage/irritation: Causes serious eye damage.
Penetron Admix®
Safety Data Sheet

Respiratory or skin sensitization: Based on available data, the classification criteria are not met.
Germ cell mutagenicity: Based on available data, the classification criteria are not met.
Carcinogenicity: Based on available data, the classification criteria are not met.
Reproductive toxicity: Based on available data, the classification criteria are not met.
Specific target organ toxicity (single exposure): Based on available data, the classification criteria are not met.
Specific target organ toxicity (repeated exposure): Based on available data, the classification criteria are not met.
Aspiration hazard: Based on available data, the classification criteria are not met.
Symptoms/injuries after inhalation: May cause respiratory tract irritation. May cause burns in the presence of moisture.
Symptoms/injuries after skin contact: Causes skin irritation. Symptoms may include redness, edema, drying, defatting and cracking of the skin. May cause burns in the presence of moisture.
Symptoms/injuries after eye contact: Causes serious eye damage. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva. May cause burns.
Symptoms/injuries after ingestion: May be harmful if swallowed. May cause stomach distress, nausea or vomiting. May cause burns in the presence of moisture.

SECTION 12: Ecological information

12.1. Toxicity
Ecology - general: No known significant effects or critical hazards.

12.2. Persistence and degradability
Penetron Admix®
Persistence and degradability: Not established.

12.3. Bioaccumulative potential
Penetron Admix®
Bioaccumulative potential: Not established.

12.4. Mobility in soil
No additional information available.

12.5. Other adverse effects
Effect on the global warming: No known ecological damage caused by this product.

SECTION 13: Disposal considerations

13.1. Waste treatment methods
Waste disposal recommendations: This material must be disposed of in accordance with all local, state, provincial, and federal regulations. The generation of waste should be avoided or minimized wherever possible.

SECTION 14: Transport information

14.1. Department of Transportation (DOT)
In accordance with DOT
Not regulated for transport

14.2. Additional information
Other information: No supplementary information available.
Special transport precautions: Do not handle until all safety precautions have been read and understood.

SECTION 15: Regulatory information

15.1. US Federal regulations
All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

15.2. US State regulations
Penetron Admix®
State or local regulations: This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.
Penetron Admix®
Safety Data Sheet

SECTION 16: Other information

Date of issue : 06/01/2007
Revision date  : 11/03/2015
Other information : None.

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