TRADE NAME: Soil-Sement®
MANUFACTURER: Midwest Industrial Supply, Inc
1101 3rd Street SE
Canton, OH 44707
EMERGENCY PHONE NUMBER: 330-456-3121
RECOMMENDED USE: Dust Suppresant; Soil Stabilizing Agent; Aggregate Pile Sealer
CHEMICAL NAME: Aqueous acrylic vinyl acetate polymer emulsion
SYNONYMS: None
SIGNAL WORD: None
HAZARD STATEMENT(S): None
PRECAUTIONARY STATEMENT(S): Wash hands and exposed areas while product is still in liquid form to minimize film formation on skin. Keep in closed containers to minimize evaporation or water.
OTHER HAZARDS: None

SECTION III -- COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS #</th>
<th>WT %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acrylic and Vinyl Acetate Polymer</td>
<td>Non-hazardous</td>
<td>5-50%</td>
</tr>
<tr>
<td>Water</td>
<td>7732-18-5</td>
<td>95-50%</td>
</tr>
</tbody>
</table>

SECTION IV -- FIRST AID MEASURES

INHALATION: Move subject to fresh air.
SKIN: Flush with large amounts of water or wash with soap and water.
EYES: Flush eyes with water for at least 15 minutes. Get medical attention.
INGESTION: Give water to drink. Call a physician.

NEVER GIVE FLUIDS OR INDUCE VOMITING IF PATIENT IS UNCONSCIOUS OR HAVING CONVULSIONS.

RECOMMENDATION TO FIREFIGHTERS ON SPECIAL PROTECTIVE EQUIPMENT OR PRECAUTIONS: None

SECTION V -- FIREFIGHTING MEASURES

EXTINGUISHING MEDIUM: N/A
Soil-Sement®

SAFETY DATA SHEET

SPECIAL FIREFIGHTING PROCEDURES: N/A

UNUSUAL FIRE AND EXPLOSION HAZARDS: Material can splatter above 212°F. Dried polymer film can burn but will not support combustion.

SPECIAL HAZARDS: None

SECTION VI -- ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS: Use proper personal protective equipment.

SPILL AND LEAK PROCEDURES: Dike and control spill. Transfer liquid to containers for recovery or disposal. Keep spills out of sewers and open bodies of water.

SECTION VII -- HANDLING AND STORAGE

STORAGE: Keep in a cool, dry, ventilated storage area and in closed containers. Avoid freezing temperatures. Minimize contact with the air to prevent microorganism contamination and reduce the formation of skins on the surface.

HANDLING: Handle in a well-ventilated workspace.

SECTION VIII -- EXPOSURE CONTROL/PERSONAL PROTECTION

VENTILATION: Mechanical exhaust at point of contaminant

RESPIRATORY PROTECTION: None required if good ventilation is maintained.

EYE PROTECTION: Chemical splash goggles recommended

PROTECTIVE CLOTHING: Impervious gloves recommended

SECTION IX -- PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Liquid
Odor: Characteristic Acrylic odor
Vapor Density: N/D
Solubility in Water: Dilutable
Relative Density: 1.01-1.15 g/mL
Melting/Freezing Point: N/D
VOC Content: 0%
Viscosity: 50 - 500 cps at 22°C
Flashpoint: Emulsion, >210°F
Flammable Limits LEL: N/D
Flammable Limits UEL: N/D
Odor Threshold: N/D
**Soil-Sement®**

**SAFETY DATA SHEET**

Initial Boiling Point/Range: N/D
Vapor Pressure: N/D
Evaporation Rate: N/D
pH: 4-9.5
Octanol/Water Coefficient: N/D
Decomposition Temperature: N/D
Flammability (solid/gas): N/A
Auto Ignition Temperature: N/A

**SECTION X -- STABILITY AND REACTIVITY**

**REACTIVITY:** None
**CHEMICAL STABILITY:** Stable
**CHEMICAL INCOMPATIBILITY:** No hazardous reactions are expected to occur under normal industrial conditions.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Thermal decomposition in the presence of air may yield carbon monoxide and/or carbon dioxide and water.

**HAZARDOUS POLYMERIZATION:** Does not occur

**CONDITIONS TO AVOID:** N/A

**SECTION XI -- TOXICOLOGICAL INFORMATION**

**EFFECTS OF OVEREXPOSURE**

**INHALATION:** Vapor from stored, undiluted product can cause headache and nausea.
**SKIN:** Stored, undiluted product is slightly irritating to skin.
**EYES:** Slightly irritating to eyes
**INGESTION:** May be irritating to digestive tract.

**CARCINOGENICITY:** N/D
**GERM CELL MUTAGENICITY:** N/D
**REPRODUCTIVE TOXIN:** N/D

<table>
<thead>
<tr>
<th>NAME</th>
<th>OSHA TWA</th>
<th>OSHA STEL</th>
<th>ACGIH TWA</th>
<th>ACGIH STEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acrylic &amp; polyvinyl</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Acetate polymer</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Water</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
</tbody>
</table>

Revision Date: 5/21/2015
SECTION XII -- ECOLOGICAL INFORMATION

Animal toxicity studies on blended SOIL-SEMENT® have not been carried out because we believe the fish toxicity studies done on the blend demonstrate it is as non-toxic as the individual emulsions which go into the blend. TABLE #1 gives the results of our fish toxicity tests.

In summary, these data show that the LC50 of SOIL-SEMENT® on goldfish is somewhere above 12,500 ppm. This is extremely low toxicity, especially in view of the legal requirement that chemicals must be labeled “toxic to fish” only if their LC50 is less than 1.0 ppm.

**TABLE I**

<table>
<thead>
<tr>
<th>EMULSION NUMBER</th>
<th>TYPE OF FISH</th>
<th>HOURS</th>
<th>LC50 PPM</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>Rainbow Trout</td>
<td>24</td>
<td>10,000</td>
</tr>
<tr>
<td>C</td>
<td>Rainbow Trout</td>
<td>96</td>
<td>8,950</td>
</tr>
<tr>
<td>C</td>
<td>Bluegill Sunfish</td>
<td>24</td>
<td>10,000</td>
</tr>
<tr>
<td>C</td>
<td>Bluegill Sunfish</td>
<td>96</td>
<td>5,640</td>
</tr>
<tr>
<td>C</td>
<td>Goldfish</td>
<td>24</td>
<td>4,200</td>
</tr>
<tr>
<td>H</td>
<td>Goldfish</td>
<td>24</td>
<td>7,500</td>
</tr>
<tr>
<td>G</td>
<td>Goldfish</td>
<td>24</td>
<td>10,000</td>
</tr>
<tr>
<td>D</td>
<td>Goldfish</td>
<td>24</td>
<td>13,400</td>
</tr>
<tr>
<td>F</td>
<td>Goldfish</td>
<td>24</td>
<td>13,400</td>
</tr>
<tr>
<td>SOIL-SEMENT®</td>
<td>Goldfish</td>
<td>24</td>
<td>12,500 - 20,000</td>
</tr>
<tr>
<td>SOIL-SEMENT®</td>
<td>Goldfish</td>
<td>48</td>
<td>12,500 - 25,000</td>
</tr>
<tr>
<td>SOIL-SEMENT®</td>
<td>Goldfish</td>
<td>72</td>
<td>12,500 - 20,000</td>
</tr>
<tr>
<td>B</td>
<td>Goldfish</td>
<td>24</td>
<td>24,000</td>
</tr>
<tr>
<td>E</td>
<td>Goldfish</td>
<td>24</td>
<td>24,000</td>
</tr>
</tbody>
</table>

The 48 hour LC50 for Daphnia Magna based on nominal test concentrations and mortality at the end of testing was calculated to be 3,482.8 parts per million (ppm).

SECTION XIII -- DISPOSAL CONSIDERATIONS

**WASTE DISPOSAL METHOD:** Consult your local authorities for regulations. Preferred waste management: recycle or reuse, incinerate with energy recovery, disposal in a licensed facility. Disposal facility should be compliant with state, local and federal government regulations.

SECTION XIV -- TRANSPORTATION INFORMATION

**DOT HAZARDOUS MATERIAL DESCRIPTION:** None

**PROPER SHIPPING NAME:** Soil-Sement®

**UN NUMBER:** N/A
SAFETY DATA SHEET

HAZARD CLASS/PACKAGING GROUP: None
LABELS REQUIRED: None

SECTION XV -- REGULATORY INFORMATION

<table>
<thead>
<tr>
<th>NFPA RATING:</th>
<th>HMIS RATING:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health:</td>
<td>Health:</td>
</tr>
<tr>
<td>Flammability:</td>
<td>Flammability:</td>
</tr>
<tr>
<td>Instability:</td>
<td>Physical Hazard:</td>
</tr>
<tr>
<td></td>
<td>PPE:</td>
</tr>
<tr>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>0</td>
<td>A</td>
</tr>
</tbody>
</table>

Toxic Chemicals present in quantities greater than the “de minimus” level are: None
OSHA HCS hazard class: Non-hazardous
EPA SARA Title III Section 313 (40CFR372): None
TSCA: all components listed or exempt
Canadian WHIMIS: N/A

SECTION XVI -- OTHER INFORMATION

LATEST REVISION: 21-May-15

ABBREVIATIONS AND SYMBOLS:

<table>
<thead>
<tr>
<th>N.D.</th>
<th>N.A.</th>
<th>N.T.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not Determined</td>
<td>Not Applicable</td>
<td>Not Tested</td>
</tr>
<tr>
<td>&lt; Less Than</td>
<td>&gt; More Than</td>
<td></td>
</tr>
</tbody>
</table>