

**SECTION I -- IDENTIFICATION OF SUBSTANCE/PREPARATION AND COMPANY/UNDERTAKING**

**TRADE NAME:** SOIL-SEMENT<sup>®</sup>  
**CHEMICAL NAME:** POLYMER EMULSION  
**SYNONYMS:** DUST RETARDANT  
**CHEMICAL FAMILY:** N/A  
**MOLECULAR WEIGHT:** N/A  
**FORMULA:** AQUEOUS ACRYLIC VINYL ACETATE POLYMER EMULSION  
**CAS REGISTRY NO.:** PRODUCT A BLEND - NO NUMBER ASSIGNED

**SECTION II -- COMPOSITION/INFORMATION ON INGREDIENTS**

<u>NAME</u>	<u>CAS REG NO.</u>	<u>WT. %</u>
Acrylic & Vinyl Acetate Polymer	Non-hazardous	5-50
Water	7732-18-5	95-50

**SECTION III -- HAZARDS IDENTIFICATION**

Acrylic & Polyvinyl Acetate Polymer	Non-hazardous
Water	Non-hazardous

**SECTION IV -- FIRST AID MEASURES**

**EYES:** Flush eyes with flowing water at least 15 minutes, get medical attention.  
**INHALATION:** Move subject to fresh air.  
**SKIN:** Flush with large amount of water or wash with soap and water.  
**INGESTION:** Give water to drink. Call a physician.  
**NEVER GIVE FLUIDS OR INDUCE VOMITING.**  
**IF PATIENT IS UNCONSCIOUS OR HAVING CONVULSIONS.**

**SECTION V -- FIRE FIGHTING MEASURES**

**FLASH POINT (TEST METHOD):** Emulsion, >210°F  
**AUTOIGNITION TEMPERATURE:** N/A  
**EXTINGUISHING MEDIUM:** N/A  
**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.

**SECTION VI - ACCIDENTAL RELEASE MEASURES**

**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**

**RESPIRATORY PROTECTION:** None required if good ventilation is maintained.

**VENTILATION:** Mechanical exhaust at point of contaminant.

**EYE PROTECTION:** Chemical splash goggles recommended.

**PROTECTIVE CLOTHING:** Impervious gloves recommended.

**OTHER:** Under normal handling conditions, the risk of exposure to residual monomer is negligible.

**SECTION IX -- PHYSICAL AND CHEMICAL PROPERTIES**

**BOILING/MELTING POINT @ 760 mm Hg:** 212°F

**VAPOR PRESSURE mm Hg @ 20°C:** 17

**SPECIFIC GRAVITY OR BULK DENSITY:** 1.01 to 1.15

**SOLUBILITY IN WATER:** Dilutable

**APPEARANCE:** Milky White Liquid

**ODOR:** Characteristic Acrylic odor

**pH:** 4.0 to 9.5

**SECTION X -- STABILITY AND REACTIVITY**

**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

**CORROSIVE TO METAL:** No

**OXIDIZER:** No

**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.

<u>NAME</u>	<u>OSHA</u>		<u>ACGIH</u>	
	<u>TWA</u>	<u>STEL</u>	<u>TWA</u>	<u>STEL</u>
Acrylic & polyvinyl Acetate Polymer	None	None	None	None
Water	None	None	None	None

**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 LC<sub>50</sub> 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 LC<sub>50</sub> is less than 1.0 ppm.

**TABLE I  
FISH TOXICITY STUDIES**

<b>EMULSION NUMBER</b>	<b>TYPE OF FISH</b>	<b>HOURS</b>	<b>LC<sub>50</sub> PPM</b>
C	Rainbow Trout	24	10,000
C	Rainbow Trout	96	8,950
C	Bluegill Sunfish	24	10,000
C	Bluegill Sunfish	96	5,640
C	Goldfish	24	4,200
H	Goldfish	24	7,500
G	Goldfish	24	10,000
D	Goldfish	24	13,400
F	Goldfish	24	13,400
SOIL-SEMENT®	Goldfish	24	12,500 - 25,000
SOIL-SEMENT®	Goldfish	48	12,500 - 25,000
SOIL-SEMENT®	Goldfish	72	12,500 - 20,000
B	Goldfish	24	24,000
E	Goldfish	24	24,000

The 48 hour LC<sub>50</sub> 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:**

Coagulate the emulsion by the stepwise addition of ferric chloride and lime or the addition of sand or other absorbent material. Remove the clear supernatant liquid and flush to a chemical sewer or landfill. Incinerate solids and the contaminated diking material according to local, state and federal regulations.

**CONTAINER DISPOSAL:**

Do not re-use containers. Do not weld on metal containers.

**SECTION XIV -- TRANSPORTATION INFORMATION**

<b>D.O.T. PROPER SHIPPING NAME (49CFR172.101):</b>	None
<b>HAZARDOUS SUBSTANCE (40CFR116):</b>	N/A
<b>REPORTABLE QUANTITY (RQ):</b>	N/A
<b>D.O.T. HAZARD CLASSIFICATION (49CFR172.101):</b>	Non-regulated
<b>D.O.T. PLACARDS REQUIRED:</b>	None
<b>POISON CONSTITUENT (49CFR173.343):</b>	N/A
<b>BILL OF LADING DESCRIPTION:</b>	Liquid plastic, NOS
<b>C NO.:</b>	N/A
<b>UN/NA CODE:</b>	N/A

**SECTION XV-- REGULATORY INFORMATION**

SOIL-SEMENT<sup>®</sup> is not a restricted article according to the Department of Transportation and International Air Transport Association regulations.

<b>EPA SARA Title III hazard class:</b>	None
<b>OSHA HCS hazard class:</b>	Non-OSHA hazardous (29CFR1910.1200)
<b>EPA SARA Title III Section 313 (40CFR372)</b>	

**Toxic Chemicals present in quantities greater than the "de minimus" level are:** None

This product is not a "controlled product" under the Canadian Workplace Hazardous Material Information System (WHMIS)

**SECTION XVI -- OTHER INFORMATION****ABBREVIATIONS AND SYMBOLS:**

N.D. - Not Determined  
< - LESS THAN

N.A. - Not Applicable  
> - MORE THAN

N.T. - Not Tested