1. Product And Company Identification

Supplier
GLB
1400 Bluegrass Lakes Parkway
Alpharetta, GA 30004 United States
Telephone Number: (770)521-5999
FAX Number: (770)521-5959
Web Site: www.poolspacare.com

Manufacturer
Advantis Technologies, Inc.
1400 Bluegrass Lakes Parkway
Alpharetta, GA 30004 United States
Telephone Number: (770) 521-5999
FAX Number: (770) 521-5959
Web Site: www.poolspacare.com

2. Composition/Information On Ingredients

<table>
<thead>
<tr>
<th>Ingredient Name</th>
<th>CAS Number</th>
<th>Percent Of Total Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poly{oxyethylene (dimethyliminio) Ethylene (dimethyliminio) Ethylene Dichloride}</td>
<td>31512-74-0</td>
<td></td>
</tr>
</tbody>
</table>

Ingredients listed in this section have been determined to be hazardous as defined in 29CFR 1910.1200. Materials determined to be health hazards are listed if they comprise 1% or more of the composition. Materials identified as carcinogens are listed if they comprise 0.1% or more of the composition. Information on proprietary materials is available in 29CFR 1910.1200(i)(1).

3. Hazards Identification

Primary Routes(s) Of Entry
- Skin Contact, Eye Contact, Inhalation

Eye Hazards
- Slightly hazardous in case of eye contact (irritant).

Skin Hazards
- Slightly hazardous in case of skin contact (irritant). Non-sensitizer for skin. Skin inflammation is characterized by itching, scaling, reddening, or, occasionally, blistering.

Ingestion Hazards
- Ingestion is not expected to be a primary route of exposure.

Inhalation Hazards
- Slightly hazardous in case of inhalation. Effects will depend on concentration and length of time of exposure.

Subchronic (Target Organ Effects)
- May cause damage to the following organs: upper respiratory tract, skin, eyes.

Chronic/Carcinogenicity Effects
- Not tested by the manufacturer. Not shown as a carcinogen by OSHA, IARC, or NTP. A two year rat carcinogenicity study showed a slight increase in c-cell adenomas in female rats. Studies with male rats and male and female mice
3. Hazards Identification - Continued

**Chronic/Carcinogenicity Effects - Continued**

did not show any evidence of carcinogenic response. This product is not considered a carcinogen.

**Signs And Symptoms**
Irritation of Eyes and Respiratory Passages

**Conditions Aggravated By Exposure**
None Known

### First Aid (Pictograms)

#### 4. First Aid Measures

**Eye**
Flush immediately with copious amounts of tap water or normal saline (minimum of 15 minutes). Take exposed individual to a health care professional, preferably an ophthalmologist, for further evaluation.

**Skin**
Wash exposed area with plenty of soap and water. Repeat washing. Remove contaminated clothing and wash thoroughly before reuse. If irritation persists consult a health professional.

**Ingestion**
DO NOT INDUCE VOMITING. Rinse with copious amounts of water or milk, first. Irrigate the esophagus and dilute stomach contents by slowly giving one to two glasses of water or milk. Avoid giving alcohol or alcohol related products. In cases where the individual is semi-comatose, comatose, or is convulsing, DO NOT GIVE FLUIDS BY MOUTH. In case of intentional ingestion of the product, seek medical assistance immediately; take individual to nearest medical facility.

**Inhalation**
If exposure by inhalation is suspected, immediately move exposed individual to fresh air. If individual experiences nausea, headache, dizziness, has difficulty breathing or is cyanotic, seek a health care professional immediately.

**Note To Physician**
No Specific Antidote is known. Treat Symptoms. Evaluate Principal Route of Entry, Seek appropriate medical attention. Never give anything by mouth to an unconscious person.

### Fire Fighting (Pictograms)

#### 5. Fire Fighting Measures

**Flash Point:** >212 °F

**Flash Point Method:** Closed Cup

**Extinguishing Media**
Water fog, carbon dioxide, foam, dry chemical.

#### 6. Accidental Release Measures

Contain and/or absorb spill with inert material (e.g. sand, vermiculite). Avoid release to the environment. Do not flush to sewer.
7. Handling And Storage

Handling Precautions
Avoid contact with eyes. Wash thoroughly after handling. Wash hands before eating, drinking, or smoking.

Storage Precautions
Store in a cool dry place. Keep out of reach of children.

Work/Hygienic Practices
Use safe chemical handling procedures suitable for the hazards presented by this material. Do not contaminate Water Food or Feed by storage or cleaning equipment.

8. Exposure Controls/Personal Protection

Engineering Controls
Local exhaust acceptable. Special exhaust not required

Eye/Face Protection
Safety glasses with side shields or goggles recommended.

Skin Protection
Chemical-resistant gloves.

Respiratory Protection
General room ventilation is normally adequate.

9. Physical And Chemical Properties

Appearance
Clear, pale yellow liquid

Odor
Mild

Chemical Type: Mixture
Physical State: Liquid
Melting Point: 32 °F <0 °C
Boiling Point: 212 °F >100 °C
Specific Gravity: 1.15 g/cm3
Percent Volitales: Not established
Vapor Pressure: Not established
pH Factor: 6-8
Solubility: Easily soluble in cold/hot water
Viscosity: Kinetic: 125cS
Evaporation Rate: Not established
## 10. Stability And Reactivity

**Stability:** Stable under normal conditions of use and storage

**Incompatible Materials**  
Anionic Polymers

**Hazardous Decomposition Products**  
Carbon monoxide may be formed upon burning.

## 11. Toxicological Information

### Skin Effects

Dermal LD50 = >2000 mg/kg Rabbit

### Acute Oral Effects

Oral LD50 = 1951 mg/kg Male rat  
Oral LD50 = 2587 mg/kg Female rat

### Acute Inhalation Effects

Inhalation LD50 = 2.9ppm (4 hours) Rat

## 12. Ecological Information

### Acute Toxicity - Fish And Invertebrates

<table>
<thead>
<tr>
<th>Compounds</th>
<th>LC50 (mg/L) 48 hours</th>
<th>LC50 (mg/L) 96 hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Invertebrate</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fathead Minnow</td>
<td>0.37</td>
<td>&gt;600</td>
</tr>
<tr>
<td>Bluegill sunfish</td>
<td>0.21</td>
<td>13</td>
</tr>
<tr>
<td>Rainbow Trout</td>
<td>0.047</td>
<td></td>
</tr>
<tr>
<td>Sheepshead minnow</td>
<td>&gt;600</td>
<td></td>
</tr>
<tr>
<td>Mysid shrimp</td>
<td>13</td>
<td></td>
</tr>
</tbody>
</table>

## 13. Disposal Considerations

Refer to applicable local, state and federal regulations as well as industry standards.

## 14. Transport Information

### Proper Shipping Name

Environmentally Hazardous Substance, Liquid, n.o.s.  
(Poly[oxoethylene(dimethyliminio)ethylene(dimethyliminio)ethylene dichloride]), Marine Pollutant

### Hazard Class

9, PGIII

### DOT Identification Number

UN3082

### Additional Shipping Paper Description

North American Emergency Response Guide No. 171  
Not regulated by DOT for ground or air shipments [see exception for marine pollutants 49CFR171.4(c)].

## 15. Regulatory Information

### State Regulations

California Proposition 65: This product had been reviewed for Prop 65 components and the following applies:  
Warning: This product may contain substance(s) which are known to the State of California to cause cancer or reproductive harm. (Contents may contain trace levels of (<10 ppm) of Dichloroethyl ether, 1,4-Dioxane and (<20 ppb) N-nitrosodimethylamine. Trace contaminants from Poly[oxoethylene(dimethyliminio)ethylene(diethyliminio)ethylene dichloride])
16. Other Information

**Revision/Preparer Information**
MSDS Preparer: JHW

**Reference Documentation**

**Disclaimer**

Although reasonable care has been taken in the preparation of this document, we extend no warranties and make no representations as to the accuracy or completeness of the information contained therein, and assume no responsibility regarding the suitability of this information for the user's intended purposes or for the consequences of its use. Each individual should make a determination as to the suitability of the information for their particular purposes(s).