**PRODUCT NAME:** GLB ALGIMYCIN 2000

**SECTION 1. PRODUCT AND COMPANY IDENTIFICATION**

<table>
<thead>
<tr>
<th>Supplier</th>
<th>REVISION DATE:</th>
<th>SUPERCEDES:</th>
</tr>
</thead>
<tbody>
<tr>
<td>GLB</td>
<td>05/26/2015</td>
<td>03/07/2012</td>
</tr>
<tr>
<td>1400 Bluegrass Lakes Parkway, Alpharetta, GA, 30004 USA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Telephone: +17705215999</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Telefax: +17705215959</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Web: <a href="http://www.poolspacare.com">www.poolspacare.com</a></td>
<td></td>
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</table>

<table>
<thead>
<tr>
<th>Manufacturer</th>
<th>MSDS Number:</th>
<th>SYNONYMS:</th>
<th>CHEMICAL FAMILY:</th>
<th>DESCRIPTION / USE:</th>
<th>FORMULA:</th>
</tr>
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<tbody>
<tr>
<td>Advantis Technologies</td>
<td>000000024398</td>
<td>None</td>
<td>None</td>
<td>None established</td>
<td>None established</td>
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<tr>
<td>1200 Bluegrass Lakes Parkway, Alpharetta, GA 30004 United States of America</td>
<td></td>
<td></td>
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</tbody>
</table>

**SECTION 2. HAZARDS IDENTIFICATION**

**GHS Classification**

<table>
<thead>
<tr>
<th>Skin irritation</th>
<th>Category 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eye irritation</td>
<td>Category 2A</td>
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</tbody>
</table>

**GHS Label element**

<table>
<thead>
<tr>
<th>Hazard pictograms</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Signal word</td>
<td>Warning</td>
<td></td>
</tr>
</tbody>
</table>

FOR ANY EMERGENCY, 24 HOURS / 7 DAYS, CALL: 1-800-654-6911 (OUTSIDE USA: 1-423-780-2970)

FOR ALL TRANSPORTATION ACCIDENTS, CALL CHEMTREC®: 1-800-424-9300 (OUTSIDE USA: 1-703-527-3887)

FOR ALL SDS QUESTIONS & REQUESTS, CALL: 1-800-511-MSDS (OUTSIDE USA: 1-423-780-2347)
Hazard statements

H315 Causes skin irritation.
H319 Causes serious eye irritation.

Precautionary statements:

Prevention:
P264 Wash skin thoroughly after handling.
P280 Wear eye protection/face protection.
P280 Wear protective gloves.

Response:
P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P332 + P313 If skin irritation occurs: Get medical advice/attention.
P337 + P313 If eye irritation persists: Get medical advice/attention.
P362 Take off contaminated clothing and wash before reuse.

Storage:
P402 + P404 Store in a dry place. Store in a closed container.
P410 + P403 Protect from sunlight. Store in a well-ventilated place.

Disposal:
P501 Dispose of contents/container in accordance with local regulation.

Other hazards
None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>CAS OR CHEMICAL NAME</th>
<th>CAS #</th>
<th>% RANGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>POLY [OXYETHYLENE (DIMETHYLIMINIO) ETHYLENE</td>
<td>31512-74-0</td>
<td>15 - 23</td>
</tr>
<tr>
<td>2-PROPEN-1-AMINIUM, N,N-DIMETHYL-N-2-PROPENYL-, C</td>
<td>26062-79-3</td>
<td>5 - 15</td>
</tr>
</tbody>
</table>

SECTION 4. FIRST AID MEASURES

General Advice: Call a poison control center or doctor for treatment advice. For 24-hour emergency medical assistance, call Arch Chemical Emergency Action Network at 1-800-654-6911. Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

Inhalation: IF INHALED: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or doctor for further treatment advice.
Skin Contact: IF ON SKIN OR CLOTHING: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

Eye Contact: IF IN EYES: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

Ingestion: IF SWALLOWED: Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

**SECTION 5. FIREFIGHTING MEASURES**

**Flammability Summary (OSHA):** Combustible above 93 deg. C / 200 deg. F.

**Flammable Properties**

- **Flash Point:** > 93 °C
- **Autoignition Temperature:** No data
- **Fire / Explosion Hazards:** May be ignited by open flame.
- **Extinguishing Media:** Use dry chemical, water fog, carbon dioxide (CO2), or foam.
- **Fire Fighting Instructions:** Use water spray to cool unopened containers. In case of fire, use normal fire-fighting equipment and the personal protective equipment recommended in Section 8 to include a NIOSH approved self-contained breathing apparatus.

**Upper Flammable / Explosive Limit, % in air:** No data

**Lower Flammable / Explosive Limit, % in air:** No data

**SECTION 6. ACCIDENTAL RELEASE MEASURES**

**Personal Protection for Emergency Situations:** Use the personal protective equipment recommended in Section 8 and a NIOSH approved self-contained breathing apparatus.

**Spill Mitigation Procedures**

**Air Release:** Not applicable

**Water Release:** If the product contaminates rivers and lakes or drains inform respective authorities.

**Land Release:** Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13). Do not contaminate ponds, waterways or ditches with chemical or used container.

**Additional Spill Information:** Prevent further leakage or spillage if safe to do so. Use personal protective equipment as required. Evacuate personnel to safe areas.
SECTION 7. HANDLING AND STORAGE

Handling: Do not take internally. Avoid contact with skin, eyes and clothing. If in eyes or on skin, rinse well with water. Avoid breathing vapours, mist or gas.

Storage: Store in a cool, dry and well ventilated place. Isolate from incompatible materials. Do not freeze.

Incompatible Materials for Storage: Refer to Section 10, “Incompatible Materials.”

SECTION 8. EXPOSURE CONTROLS/PERSICAL PROTECTION

Ventilation: No exposure limits exist for the constituents of this product. Additional ventilation beyond that of general exhaust is not normally required.

Protective Equipment for Routine Use of Product

Respiratory Protection: Respiratory protection not normally needed.
Skin Protection: Impervious gloves
Eye Protection: Safety glasses with side-shields
Protective Clothing Type: Impervious clothing

Components with workplace control parameters

no data available

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical State</td>
<td>liquid</td>
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<tr>
<td>Form</td>
<td>No data.</td>
</tr>
<tr>
<td>Color</td>
<td>tan</td>
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<tr>
<td>Odor</td>
<td>No data.</td>
</tr>
<tr>
<td>Molecular Weight</td>
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<tr>
<td>pH</td>
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<tr>
<td>Boiling Point</td>
<td>212 °F (100 °C)</td>
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<tr>
<td>Melting point/freezing point</td>
<td>Not applicable</td>
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<tr>
<td>Bulk Density</td>
<td>()</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>no data available</td>
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<tr>
<td>Vapor Density</td>
<td>no data available</td>
</tr>
<tr>
<td>Viscosity</td>
<td>no data available</td>
</tr>
<tr>
<td>Solubility in Water</td>
<td>soluble</td>
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<tr>
<td>Partition coefficient n-octanol/water</td>
<td>No data.</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>no data available</td>
</tr>
<tr>
<td>Oxidizing</td>
<td>None established</td>
</tr>
</tbody>
</table>
Volatiles, % by vol.: no data available
VOC Content: no data available
HAP Content: Not applicable

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCMI Intermediate or Final VOC’s (40 CFR 60.489). This product does not contain any VOC exemptions listed under the U.S. Clean Air Act Section 450.

SECTION 10. STABILITY AND REACTIVITY
Stability and Reactivity Summary:
Stable under normal conditions.
Conditions to Avoid:
Heat
Chemical Incompatibility:
Oxidizing agents
Decomposition Temperature:
No data

SECTION 11. TOXICOLOGICAL INFORMATION
Component Animal Toxicology
Oral LD50 value:
POLY [Oxyethylene (Dimethyliminio) Ethylene]
LD50 (60% Active Ingredient) = 1,951 mg/kg Rat male
LD50 (60% Active Ingredient) = 2,587 mg/kg Rat female
2-Propen-1-Aminium, N,N-Dimethyl-N-2-propenyl-, C
LD50 > 5,000 mg/kg Rat

Component Animal Toxicology
Dermal LD50 value:
POLY [Oxyethylene (Dimethyliminio) Ethylene]
LD50 (60% Active Ingredient) > 2,000 mg/kg Rabbit
2-Propen-1-Aminium, N,N-Dimethyl-N-2-propenyl-, C
LD50 > 20,000 mg/kg Rabbit

Component Animal Toxicology
Inhalation LC50 value:
POLY [Oxyethylene (Dimethyliminio) Ethylene]
LC50 4 h (60% Active Ingredient) = 2.9 ppm Rat
2-Propen-1-Aminium, N,N-Dimethyl-N-2-propenyl-, C
No data
Product Animal Toxicity
Oral LD50 value: Believed to be > 2,000 mg/kg
Dermal LD50 value: Believed to be > 2,000 mg/kg
Inhalation LC50 value: No data.
Skin Irritation: Not expected to cause irritation.
Eye Irritation: Not expected to cause irritation.
Skin Sensitization: Not believed to be sensitising to skin.

Subchronic / Chronic Toxicity: There are no known or reported effects from chronic exposure.

Reproductive and Developmental Toxicity: Not known or reported to cause reproductive or developmental toxicity.

Mutagenicity: Not known or reported to be mutagenic.

Carcinogenicity: This product is not known or reported to be carcinogenic by any reference source including IARC, OSHA, NTP or EPA.

POLY [OXYETHYLENE (DIMETHYLIMINIO) ETHYLENE
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 did not show any evidence of carcinogenic response. This product is not considered a carcinogen.

SECTION 12. ECOLOGICAL INFORMATION

Overview: No data for product. Individual constituents are as follows:

Ecological Toxicity Values for: POLY [OXYETHYLENE (DIMETHYLIMINIO) ETHYLENE
Rainbow trout (Salmo gairdneri), - 96 h LC50 = 0.047 mg/l
Bluegill sunfish - 96 h LC50 = 0.21 mg/l
Pimephales promelas (fathead minnow) - 96 h LC50 = 0.26 mg/l
Mysid shrimp - 96 h LC50 = 13 mg/l
Daphnia magna, - 48 h LC50 = 0.37 mg/l

Ecological Toxicity Values for: 2-PROPEN-1-AMINUM, N,N-DIMETHYL-N-2-PROPENYL-, C
Bluegill sunfish - 96 h LC50 = 0.82 - 1.3 mg/l, (40% Solution)
Rainbow trout (Salmo gairdneri), - 96 h LC50 = 0.37 mg/l (40% Solution)
Daphnia magna, - 48 h LC50 = 0.9 mg/l (In clear water), (40% Solution)
Daphnia magna, - 48 h LC50 = 1.2 - 2.5 mg/l, (In 50 ppm clay suspension), (40% Solution)
Daphnia magna, - 48 h LC50 = 24.8 mg/l (In 1000 ppm clay suspension), (40% Solution)
SECTION 13. DISPOSAL CONSIDERATIONS

CARE MUST BE TAKEN TO PREVENT ENVIRONMENTAL CONTAMINATION FROM THE USE OF THE MATERIAL. THE USER OF THE MATERIAL HAS THE RESPONSIBILITY TO DISPOSE OF UNUSED MATERIAL, RESIDUES AND CONTAINERS IN COMPLIANCE WITH ALL RELEVANT LOCAL, STATE AND FEDERAL LAWS AND REGULATIONS REGARDING TREATMENT, STORAGE AND DISPOSAL FOR HAZARDOUS AND NONHAZARDOUS WASTES.

Waste Disposal Summary: If this product becomes a waste, it DOES NOT meet the criteria of a hazardous waste as defined under 40 CFR 261, in that it does not exhibit the characteristics of hazardous waste of Subpart C, nor is it listed as a hazardous waste under Subpart D. As a nonhazardous liquid waste, it should be disposed of in accordance with local, state and federal regulations.

SECTION 14. TRANSPORT INFORMATION

DOT
UN number: 3082
Description of the goods: Environmentally hazardous substance, liquid, n.o.s.
Class: 9
Packing group: III
Labels: 9
Emergency Response Guidebook Number: 171

TDG
UN number: 3082
Description of the goods: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Class: 9
Packing group: III
Labels: 9

IATA
UN number: 3082
Description of the goods: Environmentally hazardous substance, liquid, n.o.s.
Class: 9
Packing group: III
Labels: 9MI
Packing instruction (cargo): 964
aircraft)
Packing instruction : 964
(passenger aircraft)
Packing instruction : Y964
(passenger aircraft)

**IMDG-CODE**
UN number : 3082
Description of the goods : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Poly[oxyethylene (dimethyliminio) ethylene])
Class : 9
Packing group : III
Labels : 9
EmS Number 1 : F-A
EmS Number 2 : S-F
Marine pollutant : yes

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**SECTION 15. REGULATORY INFORMATION**

This chemical is a pesticide product registered by the United States Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets (SDS), and for workplace labels of non-pesticide chemicals.

Signal word : CAUTION!
Hazard statements :
- Harmful if swallowed.
- Harmful if absorbed through skin.
- Harmful if inhaled.
- Causes moderate eye irritation.
- This pesticide is toxic to fish.

**EPCRA - Emergency Planning and Community Right-to-Know Act**

**SARA 302**
No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313**
This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**Clean Air Act**
This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 12 (40 CFR 61).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCMII Intermediate or Final VOC’s (40 CFR 60.489).

**Clean Water Act**

This product does not contain any Hazardous Substances listed under the U.S. CleanWater Act, Section 311, Table 116.4A.

This product does not contain any Hazardous Chemicals listed under the U.S. CleanWater Act, Section 311, Table 117.3.

This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307

**US State Regulations**

**Massachusetts Right To Know**

**Pennsylvania Right To Know**

Poly[oxyethylene (dimethyliminio) ethylene] 2-Propan-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, homopolymer 31512-74-0 26062-79-3

**New Jersey Right To Know**

Poly[oxyethylene (dimethyliminio) ethylene] 2-Propan-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, homopolymer 31512-74-0 26062-79-3

**California Prop 65**

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

**The components of this product are reported in the following inventories:**

**TSCA** : This is an EPA registered pesticide.
Inventories
AICS (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECl (Korea), NZIoC (New Zealand), PICCS (Philippines), TSCA (USA)

SECTION 16. OTHER INFORMATION

SECTIONS REVISED: 1
Major References: Available upon request.

THIS MATERIAL SAFETY DATA SHEET (MSDS) HAS BEEN PREPARED IN COMPLIANCE WITH THE FEDERAL OSHA HAZARD COMMUNICATION STANDARD, 29 CFR 1910.1200. THE INFORMATION IN THIS MSDS SHOULD BE PROVIDED TO ALL WHO WILL USE, HANDLE, STORE, TRANSPORT, OR OTHERWISE BE EXPOSED TO THIS PRODUCT. THIS INFORMATION HAS BEEN PREPARED FOR THE GUIDANCE OF PLANT ENGINEERING, OPERATIONS AND MANAGEMENT AND FOR PERSONS WORKING WITH OR HANDLING THIS PRODUCT. ARCH CHEMICALS BELIEVES THIS INFORMATION TO BE RELIABLE AND UP TO DATE AS OF THE DATE OF PUBLICATION BUT, MAKES NO WARRANTY THAT IT IS. ADDITIONALLY, IF THIS MSDS IS MORE THAN THREE YEARS OLD, YOU SHOULD CONTACT ARCH CHEMICALS MSDS CONTROL AT THE PHONE NUMBER ON THE FRONT PAGE TO MAKE CERTAIN THAT THIS DOCUMENT IS CURRENT.