PRODUCT NAME: **GLB pH UP**

### 1. PRODUCT AND COMPANY IDENTIFICATION

**Supplier**  
GLB  
1400 Bluegrass Lakes Parkway,  
Alpharetta, GA, 30004  
United States  
Telephone: +17705215999  
Telefax: +17705215959  
Web: www.poospacare.com  

**Manufacturer**  
Advantis Technologies  
1400 Bluegrass Lakes Parkway  
Alpharetta, GA 30004  
United States of America

**Revision Date:** 05/23/2011  
**Supercedes:** 06/01/2009  
**MSDS Number:** 000000012586  
**Synonyms:** None  
**Chemical Family:** None  
**Description / Use:** None established  
**Formula:** None established

### 2. HAZARDS IDENTIFICATION

<table>
<thead>
<tr>
<th>OSHA Hazard Classification:</th>
<th>Moderate eye irritant</th>
</tr>
</thead>
</table>

- **Routes of Entry:** Eyes Skin Inhalation Ingestion
- **Chemical Interactions:** None known.
- **Medical Conditions Aggravated:** None known.
Human Threshold Response Data
Odor Threshold: Not established for product.
Irritation Threshold: Not established for product.

Hazardous Materials Identification System / National Fire Protection Association Classifications

<table>
<thead>
<tr>
<th>Hazard Ratings</th>
<th>Health</th>
<th>Flammability</th>
<th>Physical / Instability</th>
<th>PPI / Special hazard</th>
</tr>
</thead>
<tbody>
<tr>
<td>HMIS</td>
<td>2*</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>NFPA</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

Immediate (Acute) Health Effects
Inhalation Toxicity: May be harmful if inhaled. Inhalation of dust may cause irritation to the mucous membranes of the respiratory tract. Any irritation would be transient with no permanent damage expected.

Skin Toxicity: Contact with intact skin may cause slight to mild irritation consisting of reversible redness. Contact with abraded skin may cause moderate irritation consisting of transient redness and swelling. This irritant effect would not be expected to result in permanent damage. Not expected to be toxic from dermal contact.

Eye Toxicity: Causes eye irritation.

Ingestion Toxicity: Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea.

Acute Target Organ Toxicity: This product is moderately irritating to the eyes and upon inhalation may cause irritation to the mucous membranes of the respiratory tract. Ingestion may cause gastrointestinal discomfort.

Prolonged (Chronic) Health Effects
Carcinogenicity: This product is not known or reported to be carcinogenic by any reference source including IARC, OSHA, NTP or EPA.

Reproductive and Developmental Toxicity:
Inhalation: There are no known or reported effects from chronic exposure except for effects similar to those experienced from acute exposure.

Skin Contact: Repeated or prolonged skin exposure may cause dermatitis and possible "soda ulcers" (blistering) of the hands and wrists. This can result in secondary infections.

Ingestion: There are no known or reported effects from chronic ingestion except for effects similar to those experienced from single exposure.

Sensitization: This material is not known or reported to be a skin or respiratory sensitizer.
Chronic Target Organ Toxicity: There are no known or reported effects to humans from repeated exposure to this product.

Supplemental Health Hazard Information: No additional health information available.

### 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>Sodium carbonate</td>
<td>497-19-8</td>
<td></td>
</tr>
</tbody>
</table>

### 4. FIRST AID MEASURES

**Inhalation:** IF INHALED: Remove individual to fresh air. Seek medical attention if breathing becomes difficult or if respiratory irritation develops. If not breathing, give artificial respiration. Call for medical assistance.

**Skin Contact:** IF ON SKIN: Immediately flush skin with plenty of water for 15 minutes. If clothing comes in contact with the product, the clothing should be removed immediately and laundered before re-use. Seek medical attention.

**Eye Contact:** IF IN EYES: Flush eyes with plenty of water for at least 15 minutes. Seek medical attention if irritation develops.

**Ingestion:** IF SWALLOWED: Call a physician immediately. DO NOT induce vomiting unless directed to do so by a physician. Never give anything by mouth to an unconscious person.

### 5. FIRE FIGHTING MEASURES

**Flammability Summary (OSHA):** The product is not flammable., Not combustible., The substance or mixture is not classified as pyrophoric., Not explosive

**Flammable Properties**

**Fire / Explosion Hazards:** Will not burn

**Extinguishing Media:** Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**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.

**Hazardous Combustion Products:** Carbon monoxide, Carbon dioxide, Sodium oxide
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: This material is soluble in water. Notify all downstream users of possible contamination. Divert water flow around spill if possible and safe to do so.
Land Release: Sweep up and shovel into suitable containers for disposal. Avoid dust generation. Do not place spill materials back in their original containers. After removal, flush contaminated area thoroughly with water.
Additional Spill Information: Prevent further leakage or spillage if safe to do so. Use personal protective equipment as required. Evacuate personnel to safe areas.

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 dust.
Storage: Store in a cool, dry and well ventilated place. Isolate from incompatible materials.
Incompatible Materials for Storage: Refer to Section 10, "Incompatible Materials."

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Ventilation: Local exhaust ventilation is recommended if significant dusting occurs. Otherwise use general exhaust ventilation.

Protective Equipment for Routine Use of Product
Respiratory Protection: Respiratory protection not normally needed. If dusting occurs, wear a NIOSH approved N95 dust respirator.
Skin Protection: Impervious gloves
Eye Protection: Chemical resistant goggles must be worn.
Protective Clothing Type: Natural rubber, Neoprene, Nitrile
General Protective Measures: Ensure that eyewash stations and safety showers are close to the workstation location.

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Exposure Limit Data

<table>
<thead>
<tr>
<th>CHEMICAL NAME</th>
<th>CAS #</th>
<th>Name of Limit</th>
<th>Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Data Found</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

9. PHYSICAL AND CHEMICAL PROPERTIES

- **Physical State:** solid
- **Form:** No data.
- **Color:** No data.
- **Odor:** No data.
- **Molecular Weight:** None established
- **Specific Gravity:** 2.5
  - 20 °C
- **pH:** 11.0 - 12.0
  - 10 g/l (as aqueous solution)
- **Boiling Point:** Decomposes before boiling
- **Freezing Point:** 851.1 °C
  - 1,564 °F
- **Melting Point:** 851.1 °C
  - 1,564 °F
- **Density:** 1.04 g/cm³
- **Bulk Density:** no data available
- **Vapor Pressure:** not applicable
- **Vapor Density:** not applicable
- **Viscosity:** no data available
- **Solubility in Water:** 320 g/l
  - 25 °C
- **Partition coefficient n-octanol/water:** Not applicable
- **Evaporation Rate:** not applicable
- **Oxidizing:** None established
- **Volatiles, % by vol.:** not applicable
- **VOC Content:** not applicable
- **HAP Content:** Not applicable

10. STABILITY AND REACTIVITY

- **Stability and Reactivity Summary:** Stable under normal conditions.
- **Conditions to Avoid:** Heat.
- **Chemical Incompatibility:** Aluminum powder, Acids, Fluorine, Molten lithium
- **Hazardous Decomposition Products:** Carbon monoxide, Carbon dioxide, Sodium oxide
Decomposition Temperature: 851 °C

11. TOXICOLOGICAL INFORMATION

Component Animal Toxicology
Oral LD50 value:
Sodium carbonate LD50 = 4,090 mg/kg rat

Component Animal Toxicology
Dermal LD50 value:
Sodium carbonate LD50 Believed to be > 2,000 mg/kg rabbit

Component Animal Toxicology
Inhalation LC50 value:
Sodium carbonate LC50 1 h = 4.6 MG/L rat

Product Animal Toxicity
Oral LD50 value: LD50 = 4,090 mg/kg rat
Dermal LD50 value: LD50 Believed to be > 2,000 mg/kg rabbit
Inhalation LC50 value: LC50 1 h = 4.6 mg/l rat

Skin Irritation: May cause mild skin irritation.
Eye Irritation: Moderate eye irritant
Skin Sensitization: This material is not known or reported to be a skin or respiratory sensitizer.

Acute Toxicity: Contact with the eyes and mucous membranes causes transient irritation. Minor corneal involvement may occur if product is not rinsed immediately from the eyes. Inhalation may cause irritation. Contact with skin causes irritation.

Subchronic / Chronic Toxicity: Damage to lungs has been observed in laboratory animals from repeated inhalation of high concentrations (70 mg/m3). This damage is characterized by thickening of the walls of the air sacs and a low grade of pulmonary inflammation. The risk to human health is low due to the high concentration required to produce the effect. Repeated or prolonged skin contact with this product may cause dermatitis and blistering.

Reproductive and Developmental Toxicity: This chemical has been tested in laboratory animals and no evidence of teratogenicity was seen.

Sodium carbonate This chemical has been tested in laboratory animals and no evidence of teratogenicity was seen.
Mutagenicity: This product was determined to be non-mutagenic in the Ames assay. It was also shown to be non-clastogenic in the chromosomal aberration test.

Sodium carbonate This product was determined to be non-mutagenic in the Ames assay. It was also shown to be non-clastogenic in the chromosomal aberration test.

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

12. ECOLOGICAL INFORMATION

Overview: Practically non-toxic to fish and other aquatic organisms.

Ecological Toxicity Values for: Sodium carbonate

<table>
<thead>
<tr>
<th>Species</th>
<th>Concentration (mg/l)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fathead minnow (Pimephales promelas), (nominal, static).</td>
<td>96 h LC50 &lt; 850 mg/l</td>
</tr>
<tr>
<td>Bluegill</td>
<td>(nominal, static). 96 h LC50 = 320 mg/l</td>
</tr>
<tr>
<td>Mosquito fish</td>
<td>(nominal, static). 96 h LC50 = 740 mg/l</td>
</tr>
<tr>
<td>Daphnia magna</td>
<td>(nominal, static). 48 h LC50 = 265 mg/l</td>
</tr>
<tr>
<td>Ceriodaphnia dubia</td>
<td>(nominal) 48 h EC50 = 199.82 mg/l</td>
</tr>
<tr>
<td>Navicula seminulum (diatom)</td>
<td>(nominal, static). 96 h EC50 = 242 mg/l</td>
</tr>
</tbody>
</table>

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 solid waste it should be disposed of in accordance with local, state...
and federal regulations.

Potential US EPA Waste Codes: not applicable

14. TRANSPORT INFORMATION

Land (US DOT): Not Regulated
Water (IMDG): NOT REGULATED AS A HAZARDOUS MATERIAL, Marine Pollutant: No

Air (IATA): NOT REGULATED AS A HAZARDOUS MATERIAL,
Emergency Response Guide Number: Not applicable

15. REGULATORY INFORMATION

UNITED STATES:
Toxic Substances Control Act (TSCA): The components of this product are listed on the TSCA Inventory of Existing Chemical Substances.
EPA Pesticide Registration Number: None established
FIFRA Listing of Pesticide Chemicals (40 CFR 180): Not registered in the US under FIFRA.

Superfund Amendments and Reauthorization Act (SARA) Title III:
Hazard Categories Sections 311 / 312 (40 CFR 370.2):
Health Immediate (Acute) Health Hazard, Delayed (Chronic) Health Hazard
Physical None

Extremely Hazardous Substance Section 302 - Threshold Planning Quantity:
ZUS_SAR302 TPQ (threshold planning quantity) None established

Reportable Quantity (49 CFR 172.101, Appendix):
ZUS_CERCLA Reportable quantity None established
ZUS_SAR302 Reportable quantity None established

Supplier Notification Requirements (40 CFR 372.45), 313 Reportable Components
ZUS_SAR313 De minimis concentration None established
Clean Air Act Toxic ARP Section 112r:
CAA 112R None established

Clean Air Act Socmi:
HON SOC None established

Clean Air Act VOC Section 111:
CAA 111 None established

Clean Air Act Haz. Air Pollutants Section 112:
ZUS_CAAHAP None established
ZUS_CAAHRP None established
CAA AP None established

State Right-to-Know Regulations Status of Ingredients

**Pennsylvania:**

<table>
<thead>
<tr>
<th>CAS #</th>
<th>COMPONENT NAME</th>
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</thead>
<tbody>
<tr>
<td>ZUSPA_RTK</td>
<td>None established</td>
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**New Jersey:**

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<th>CAS #</th>
<th>COMPONENT NAME</th>
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<tr>
<td>ZUSNJ_RTK</td>
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**Massachusetts:**

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<td>ZUSMA_RTK</td>
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**California Proposition 65:**

<table>
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<th>CAS #</th>
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<tr>
<td>ZUSCA_P65</td>
<td>None established</td>
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**WHMIS Hazard Classification:**

Ingredient Disclosure List (WHMIS)  
2007-08-24  
Threshold limits: 1 Weight percent  
392  
Sodium carbonate
16. OTHER INFORMATION

MSDS REVISION STATUS:
SECTION REVISED: First formulated version in SAP.
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
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