

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 MSDS QUESTIONS & REQUESTS, CALL: 1-800-511-MSDS (OUTSIDE  
USA: 1-423-780-2347)

PRODUCT NAME: **GLB CANADA 1458**

## 1. PRODUCT AND COMPANY IDENTIFICATION

<b>Supplier</b> GLB 1400 Bluegrass Lakes Parkway , Alpharetta, GA, 30004 USA  Telephone: +17705215999 Telefax: +17705215959 Web: www.poolspacare.com	REVISION DATE: 03/16/2012 SUPERCEDES:  MSDS Number: 000000014973 SYNONYMS: None CHEMICAL FAMILY: None DESCRIPTION / USE: Water treatment chemical FORMULA: NOT APPLICABLE/MIXTURE
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**Manufacturer**  
Advantis Technologies  
1400 Bluegrass Lakes Parkway  
Alpharetta, GA 30004  
United States of America

## 2. HAZARDS IDENTIFICATION

OSHA Hazard  
Classification:

**Corrosive, Possible skin sensitizer, Oxidizer**

Routes of Entry: Eyes Skin Inhalation Ingestion  
Medical Conditions Aggravated: Asthma, Respiratory disorders

### 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**

<u>Hazard Ratings :</u>	<u>Health</u>	<u>Flammability</u>	<u>Physical / Instability</u>	<u>PPI / Special hazard.</u>
HMIS	3	0	0	
NFPA	3	0	0	NFPA Oxidizer Class: Meets the criteria of an NFPA Class 1 Oxidizer

**Immediate (Acute) Health Effects**

Inhalation Toxicity:	May cause respiratory irritation.
Skin Toxicity:	Corrosive to skin
Eye Toxicity:	Corrosive. Burns can occur following exposure. Direct contact may cause impairment of vision, corneal damage and/or blindness. Rinsing of the eye should take place immediately.
Ingestion Toxicity:	Irritation and/or burns can occur to the entire gastrointestinal tract, including the stomach and intestines, characterized by nausea, vomiting, diarrhea, abdominal pain, bleeding, and/or tissue ulceration. Ingestion may cause severe damage to the gastrointestinal tract with the potential to cause perforation.
Acute Target Organ Toxicity:	Eyes, Skin, Respiratory Tract, Gastrointestinal tract

**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:	Not known or reported to cause reproductive or 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:	There are no known or reported effects from chronic exposure except for effects (if any) similar to those experienced from acute exposure.
Ingestion:	There are no known or reported effects from chronic ingestion except for effects similar to those experienced from single exposure.
Sensitization:	May cause allergic skin sensitization in some individuals.
Chronic Target Organ Toxicity:	None known
Supplemental Health Hazard Information :	No additional health information available.

### 3. COMPOSITION / INFORMATION ON INGREDIENTS

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<u>CAS OR CHEMICAL NAME</u>	<u>CAS #</u>	<u>% RANGE</u>
POTASSIUM PEROXYMONOSULFATE	10058-23-8	
POTASSIUM SULFATE	7778-80-5	
POTASSIUM BISULFATE	7646-93-7	
Sodium carbonate	497-19-8	
Sodium tetraborate pentahydrate	12179-04-3	
POTASSIUM PEROXYDISULFATE	7727-21-1	
MAGNESIUM CARBONATE	546-93-0	

### 4. FIRST AID MEASURES

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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: Immediately flush eyes with plenty of water for at least 15 minutes. Seek medical attention immediately.
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**

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Flammability Summary (OSHA):	Product is not known to be flammable, combustible, pyrophoric or explosive.
<u>Flammable Properties</u>	
Flash Point:	not applicable
Autoignition Temperature:	not applicable
Fire / Explosion Hazards:	Material will not ignite or burn. Will release oxygen when heated, intensifying a fire
Extinguishing Media:	Water
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 available
Lower Flammable / Explosive Limit, % in air:	no data available

## **6. ACCIDENTAL RELEASE MEASURES**

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Personal Protection for Emergency Situations:	Additional protective clothing must be worn to prevent personal contact with this material. Those items include but are not limited to boots, impervious gloves, hard hat, splash-proof goggles, impervious clothing, i.e., chemically impermeable suit, self-contained breathing apparatus.
<u>Spill Mitigation Procedures</u>	
Air Release:	Keep people away from and upwind of spill/leak.
Water Release:	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.
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**

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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. Keep containers tightly closed when not in use.

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 : Wear a NIOSH approved respirator if levels above the exposure limits are possible.  
 Respirator Type : NIOSH approved full-face air purifying respirator with an N95 filter. Air purifying respirators should not be used in oxygen deficient or IDLH atmospheres or if exposure concentrations exceed ten (10) times the published limit.  
 Skin Protection : Avoid contact with skin. Impervious gloves A full impervious suit is recommended if exposure is possible to a large portion of the body.  
 Eye Protection: Chemical resistant goggles must be worn. Face-shield  
 Protective Clothing Type: Impervious, Neoprene, Butyl rubber  
 General Protective Measures: Ensure that eyewash stations and safety showers are close to the workstation location.

### Exposure Limit Data

<u>CHEMICAL NAME</u>	<u>CAS #</u>	<u>Name of Limit</u>	<u>Exposure</u>
Sodium tetraborate pentahydrate	12179-04-3	ACGIH	2 mg/m <sup>3</sup> TWA Inhalable fraction
Sodium tetraborate pentahydrate	12179-04-3	ACGIH	6 mg/m <sup>3</sup> STEL Inhalable fraction
POTASSIUM PEROXYDISULFATE	7727-21-1	ACGIH	0.1 mg/m <sup>3</sup> TWA 1996 Adoption
MAGNESIUM CARBONATE	546-93-0	OSHA Z1	15 mg/m <sup>3</sup> TWA total dust
MAGNESIUM CARBONATE	546-93-0	OSHA Z1	5 mg/m <sup>3</sup> TWA respirable fraction

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: granular  
 Form: solid

Color:	blue
Odor:	none
Molecular Weight:	None established
Specific Gravity :	1.2 (@ 20 Deg. C)
pH :	7.8 1% solution
Boiling Point:	not applicable
Freezing Point:	no data available
Melting Point:	no data available
Density:	no data available
Bulk Density:	no data available
Vapor Pressure:	no data available
Vapor Density:	no data available
Viscosity:	no data available
Solubility in Water:	250 g/l (@ 20 Deg. C)
Partition coefficient n- octanol/water:	no data available
Evaporation Rate:	not applicable
Oxidizing:	Product has oxidizing properties.
Volatiles, % by vol.:	no data available
VOC Content	no data available
HAP Content	Not applicable

## 10. STABILITY AND REACTIVITY

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Stability and Reactivity Summary:	Stable under normal conditions.
Conditions to Avoid:	High temperatures, Exposure to moist air or water
Chemical Incompatibility:	Oxidizing agents, Heavy metal salts, Cyanides, Halides
Hazardous Decomposition Products:	Oxygen, Heat., Other hazardous decomposition products may be formed.
Decomposition Temperature:	no data available

## 11. TOXICOLOGICAL INFORMATION

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### Component Animal Toxicology

#### Oral LD50 value:

POTASSIUM BISULFATE LD50 = 2,340 mg/kg rat

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Sodium carbonate LD50 = 4,090 mg/kg rat  
 Sodium tetraborate LD50 3,200 - 3,400 mg/kg = Rat  
 pentahydrate

Component Animal Toxicology

Dermal LD50 value:

Sodium carbonate LD50 Believed to be > 2,000 mg/kg rabbit  
 Sodium tetraborate LD50 > 2,000 mg/kg Rabbit  
 pentahydrate

Component Animal Toxicology

Inhalation LC50 value:

Sodium carbonate LC50 1 h = 4.6 MG/L rat  
 Sodium tetraborate Inhalation LC50 4 h > 2 MG/L Rat  
 pentahydrate

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 No data.

value:

Skin Irritation: Corrosive to skin  
 Eye Irritation: Corrosive to eyes  
 Skin Sensitization: Possible skin sensitizer based on animal tests

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.

Sodium carbonate This chemical has been tested in laboratory animals and no evidence of teratogenicity was seen.

Sodium tetraborate pentahydrate Boric acid has been evaluated in several laboratory animal species and in only one species was found to cause fetotoxicity at maternally toxic doses. Based on this data, this product may have the potential to cause developmental toxicity.

Mutagenicity: Not known or reported to be mutagenic.  
 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: No data for product. Individual constituents are as follows:

### **Ecological Toxicity Values for: POTASSIUM SULFATE**

- Lepomis macrochirus (Bluegill sunfish) - 96 hr. EC50 (cell growth inhibition) 96 h LC50 = 3,550 mg/l
- Pimephales promelas (fathead minnow) - 96 h LC50 = 680 mg/l
- Daphnia magna (Water flea) - 48 h EC50= 720 mg/l

### **Ecological Toxicity Values for: Sodium carbonate**

- Fathead minnow (Pimephales promelas), - (nominal, static). 96 h LC50 < 850 mg/l
- Bluegill - (nominal, static). 96 h LC50 = 320 mg/l
- Mosquito fish - (nominal, static). 96 h LC50 = 740 mg/l
- Daphnia magna, - (nominal, static). 48 h LC50= 265 mg/l
- Ceriodaphnia dubia - (nominal) 48 h EC50= 199.82 mg/l
- Navicula seminulum (diatom) - (nominal, static). 96 h EC50 = 242 mg/l

### **Ecological Toxicity Values for: Sodium tetraborate pentahydrate**

- Rainbow trout (embryo - larval stage) - 24 day LC50 (chronic toxicity) = 88 mg/l
- Daphnia magna, - 24 h EC50= 242 mg/l
- Green algae (Scenedesmus subspicatus) - 96 h EC10 = 24 mg/l

### **Ecological Toxicity Values for: POTASSIUM PEROXYDISULFATE**

- Cyprinus carpio (Carp) - 48 h LC50 = 1,360 mg/l
- Oncorhynchus mykiss (rainbow trout) - 48 h LC50 = 234 mg/l
- Poecilia reticulata (guppy) - 48 h LC50 = 845 mg/l
- Daphnia magna (Water flea) - 48 h LC50= 92 mg/l



### 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.

### 14. TRANSPORT INFORMATION

Land (US DOT):                      UN3260 CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S.  
(MONOPERSULFATE COMPOUND) 8 II

Water (IMDG):                      UN3260 CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S.,  
(MONOPERSULFATE COMPOUND) 8 II

Air (IATA):                      UN3260 CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S.,  
(MONOPERSULFATE COMPOUND) 8 II

Emergency Response Guide Number:                      ERG # 154

Transportation Notes:                      Under specific circumstances, this product can ship under two transport exceptions, Limited Quantity or Consumer Commodity. See Bill of Lading for proper shipping description.

EMS:                      F-A, S-B

### 15. REGULATORY INFORMATION

**UNITED STATES:**

Toxic Substances Control Act (TSCA):                      This chemical is for export only and thus, is not subject to TSCA regulations.

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  
Physical None

**Emergency Planning & Community Right to Know (40 CFR 355, App. A):**

**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:**

CAS #	COMPONENT NAME
7727-21-1	POTASSIUM PEROXYDISULFATE

ZUSPA\_RTK

Pennsylvania: Hazardous substance list  
1989-08-11

PEROXYDISULFURIC ACID ( $[(HO)S(O)_2]_2O_2$ ), DIPOTASSIUM SALT

**New Jersey:**

CAS #	COMPONENT NAME
546-93-0	MAGNESIUM CARBONATE
7646-93-7	POTASSIUM BISULFATE
7727-21-1	POTASSIUM PEROXYDISULFATE

ZUSNJ\_RTK

New Jersey Right to Know Hazardous Substance List (RTK-HSL)

2007-03-01

MAGNESITE CARBONIC ACID, MAGNESIUM SALT (1:1)

New Jersey Right to Know Hazardous Substance List (RTK-HSL)

2007-03-01

POTASSIUM HYDROGEN SULFATE POTASSIUM BISULFATE SULFURIC ACID,  
MONOPOTASSIUM SALT

Special Health Hazard - Corrosive

New Jersey Right to Know Hazardous Substance List (RTK-HSL)

2007-03-01

POTASSIUM PERSULFATE PEROXYDISULFURIC ACID, ( $[(HO)S(O)_2]_2O_2$ ),  
DIPOTASSIUM SALT

**Massachusetts:**

CAS #	COMPONENT NAME
546-93-0	MAGNESIUM CARBONATE
7727-21-1	POTASSIUM PEROXYDISULFATE
12179-04-3	Sodium tetraborate pentahydrate

ZUSMA\_RTK

Massachusetts Right to Know List of Chemicals and Hazard Classifications

1991-07-01

MAGNESITE DUST

massachusetts hazardous substance

Massachusetts Right to Know List of Chemicals and Hazard Classifications

1993-04-24

POTASSIUM PERSULFATE

Massachusetts Right to Know List of Chemicals and Hazard Classifications

1991-07-01  
BORATES, TETRA, SODIUM SALTS  
massachusetts hazardous substance

Massachusetts Right to Know List of Chemicals and Hazard Classifications  
1993-04-24  
BORATES, TETRA, SODIUM SALTS, PENTAHYDRATE

**California Proposition 65:**

CAS #	COMPONENT NAME
ZUSCA_P65	None established

**WHMIS Hazard Classification:**

Ingredient Disclosure List (WHMIS)  
2007-08-24  
Threshold limits: 1 Weight percent  
1513  
Potassium hydrogen sulfate

Ingredient Disclosure List (WHMIS)  
1988-01-20  
Threshold limits: 0.1 Weight percent  
1252  
PERSULFATE COMPOUNDS

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

**16. OTHER INFORMATION**

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MSDS REVISION STATUS :  
Major References : Available upon request.

**MATERIAL SAFETY  
DATA SHEET**

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. .