

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 OXY-BRITE**

## 1. PRODUCT AND COMPANY IDENTIFICATION

<b>Supplier</b> GLB 1400 Bluegrass Lakes Parkway , Alpharetta, GA, 30004 USA	REVISION DATE: 11/20/2013 SUPERCEDES: 11/06/2012
Telephone: +17705215999 Telefax: +17705215959 Web: www.poolspacare.com	MSDS Number: 000000012469 SYNONYMS: None CHEMICAL FAMILY: None DESCRIPTION / USE: Water treatment chemical FORMULA: None established

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

## 2. HAZARDS IDENTIFICATION

OSHA Hazard  
Classification:

**Corrosive, Oxidizer, Respiratory irritant.**

Routes of Entry:	Eyes Skin Inhalation Ingestion
Chemical Interactions:	No known interactions
Medical Conditions Aggravated:	Asthma, respiratory and cardiovascular disease, Skin diseases including eczema and sensitization

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	1	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 to eyes.  
 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: This product may be severely irritating and/or corrosive to all tissues contacted and upon inhalation, may cause irritation to mucous membranes and the upper respiratory 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.  
 Skin Contact: There are no known or reported effects from chronic exposure.  
 Skin Absorption: May be absorbed through skin, but it is unlikely that harmful effects will occur unless contact is prolonged, repeated, and extensive.  
 Ingestion: There are no known or reported effects from chronic ingestion except for effects similar to those experienced from single exposure.  
 Eye Contact: Prolonged contact may result in permanent damage.  
 Sensitization: Possible skin sensitizer based on animal tests  
 Chronic Target Organ Toxicity: Respiratory Tract, Eyes, Skin, Digestive Tract

Supplemental Health Hazard Information : No additional health information available.

### 3. COMPOSITION / INFORMATION ON INGREDIENTS

<u>CAS OR CHEMICAL NAME</u>	<u>CAS #</u>	<u>% RANGE</u>
Pentapotassium bis(peroxymonosulphate) bis(sulphate)	70693-62-8	
Sodium tetraborate pentahydrate	12179-04-3	
POTASSIUM PEROXYDISULFATE	7727-21-1	
Tetra[carbonato(2-)]dihydroxypentamagnesium	7760-50-1	

Active Ingredient in this composition is POTASSIUM PEROXYMONOSULFATE, CAS. No. 10058-23-8, Concentration: 43-47% (Typical 45%)

### 4. FIRST AID MEASURES

General Advice:	Call a physician immediately.
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 only.
Fire Fighting Instructions:	In case of fire, use normal fire-fighting equipment and the personal protective equipment recommended in Section 8. Use water to cool containers.
Upper Flammable / Explosive Limit, % in air:	Not applicable
Lower Flammable / Explosive Limit, % in air:	Not applicable

## 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 creating dust.
Additional Spill Information :	Stop source of spill as soon as possible and notify appropriate personnel. Utilize emergency response personal protection equipment prior to the start of any response. Evacuate all non-essential personnel. Dispose of spill residues per guidelines under Section 13, Disposal Consideration.

## 7. HANDLING AND STORAGE

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Handling:	Do not take internally. Avoid contact with skin, eyes and clothing. Upon contact with skin or eyes, wash off with water. Avoid inhalation of dust and fumes.
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Storage: Store in a cool dry ventilated location, away from sources of ignition or other incompatible conditions and chemicals. Keep container(s) closed.

Incompatible Materials for Storage: Refer to Section 10, "Incompatible Materials."

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Ventilation: Local exhaust ventilation or other engineering controls are normally required when handling or using this product to keep airborne exposures below the TLV, PEL or other recommended exposure limit.

### Protective Equipment for Routine Use of Product

Respiratory Protection : Wear a NIOSH approved respirator if levels above the exposure limits are possible., Wear a NIOSH approved N95 respirator.

Skin Protection : Wear impervious gloves to avoid skin contact. A full impervious suit is recommended if exposure is possible to a large portion of the body.

Eye Protection: Use chemical goggles.

Protective Clothing Type: Neoprene

General Protective Measures: An eye wash and safety shower should be provided in the immediate work area.

### 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

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: solid  
 Form: granular  
 Color: purple  
 Odor: none  
 Molecular Weight: None established  
 Specific Gravity : 1.2  
 20 °C

pH :	1.43 10% solution
Boiling Point:	no data available
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:	Not volatile
Viscosity:	no data available
Solubility in Water:	250 g/l 20 °C
Partition coefficient n-octanol/water:	Not applicable
Evaporation Rate:	not applicable
Oxidizing:	None established
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:	Decomposes when heated or dampened, releasing oxygen and heat, Oxides of sulfur
Decomposition Temperature:	no data available

## 11. TOXICOLOGICAL INFORMATION

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### Component Animal Toxicology

#### Oral LD50 value:

Pentapotassium bis(peroxymonosulphate) bis(sulphate)	LD50	500 mg/kg	Rat
Sodium tetraborate pentahydrate	LD50	3,200 - 3,400 mg/kg =	Rat

Component Animal Toxicology

Dermal LD50 value:

Pentapotassium bis(peroxymonosulphate) bis(sulphate) LD50 > 2,000 mg/kg Rat  
Sodium tetraborate pentahydrate LD50 > 2,000 mg/kg Rabbit

Component Animal Toxicology

Inhalation LC50 value:

Sodium tetraborate pentahydrate Inhalation LC50 4 h > 2 MG/L Rat

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

Acute Toxicity: This product is corrosive to all tissues contacted and upon inhalation, may cause irritation to mucous membranes and respiratory tract.

Subchronic / Chronic Toxicity: Not known or reported to cause subchronic or chronic toxicity.

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

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.

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: Moderately toxic to fish and other aquatic organisms.

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 will be a nonhazardous waste.

Disposal Methods : 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): 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
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
ZUS_SAR302	TPQ (threshold planning quantity)	None established

#### Reportable Quantity (49 CFR 172.101, Appendix):

ZUS_CERCLA	Reportable quantity	None established
ZUS_CERCLA	Reportable quantity	None established
ZUS_SAR302	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
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ZUS\_SAR313 De minimis concentration None established

**Clean Air Act Toxic ARP Section 112r:**

CAA 112R None established  
CAA 112R None established

**Clean Air Act Socmi:**

HON SOC None established  
HON SOC None established

**Clean Air Act VOC Section 111:**

CAA 111 None established  
CAA 111 None established

**Clean Air Act Haz. Air Pollutants Section 112:**

ZUS\_CAAHAP None established  
ZUS\_CAAHAP None established

ZUS\_CAAHRP None established  
ZUS\_CAAHRP None established

CAA AP None established  
CAA AP None established

**State Right-to-Know Regulations Status of Ingredients**

**Pennsylvania:**

CAS #	COMPONENT NAME
7727-21-1	POTASSIUM PEROXYDISULFATE

**Pennsylvania:**

CAS #	COMPONENT NAME
7727-21-1	POTASSIUM PEROXYDISULFATE

ZUSPA\_RTK

Pennsylvania: Hazardous substance list  
1989-08-11  
PEROXYDISULFURIC ACID ([ (HO)S(O)2]2O2), DIPOTASSIUM SALT

ZUSPA\_RTK

Pennsylvania: Hazardous substance list  
1989-08-11  
PEROXYDISULFURIC ACID ([ (HO)S(O)2]2O2), DIPOTASSIUM SALT

**New Jersey:**

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

**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  
 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]2O2),  
 DIPOTASSIUM SALT

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

2007-03-01  
 MAGNESITE CARBONIC ACID, MAGNESIUM SALT (1:1)

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]2O2),  
 DIPOTASSIUM SALT

**Massachusetts:**

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

**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  
1993-04-24  
POTASSIUM PERSULFATE

Massachusetts Right to Know List of Chemicals and Hazard Classifications  
1991-07-01  
MAGNESITE DUST  
massachusetts hazardous substance

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

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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

1513

Potassium hydrogen sulfate

Ingredient Disclosure List (WHMIS)

1988-01-20

Threshold limits: 0.1 Weight percent

1252

PERSULFATE COMPOUNDS

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**16. OTHER INFORMATION**

MSDS REVISION STATUS :

SECTIONS REVISED:

3

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. .