FOR ANY EMERGENCY, 24 HOURS / 7 DAYS, CALL:

FOR ALL TRANSPORTATION ACCIDENTS, CALL CHEMTREC®:

FOR ALL SDS QUESTIONS & REQUESTS, CALL:

1-800-654-6911 (OUTSIDE USA: 1-423-780-2970) 1-800-424-9300 (OUTSIDE USA: 1-703-527-3887) 1-800-511-MSDS (OUTSIDE USA: 1-423-780-2347)

PRODUCT NAME: GLB TLC

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

<u>Supplier</u> GLB 1400 Bluegrass Lakes Parkway ,	REVISION DATE: SUPERCEDES:	05/26/2015 07/09/2009
Alpharetta, GA, 30004 USA	MSDS Number: SYNONYMS:	00000024480
Telephone: +17705215999 Telefax: +17705215959 Web: www.poolspacare.com	CHEMICAL FAMILY: DESCRIPTION / USE FORMULA:	None None established None established

Manufacturer Advantis Technologies 1200 Bluegrass Lakes Parkway Alpharetta, GA 30004 United States of America

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification		
Corrosive to metals	:	Category 1
Acute toxicity (Inhalation)	:	Category 4
Skin corrosion	:	Category 1A
Serious eye damage	:	Category 1
Specific target organ toxicity - single exposure	:	Category 3 (Respiratory system)

GHS Label element

SAFETY DATA SHEET

Hazard pictograms	
Signal word	: Danger
Hazard statements	 H290 May be corrosive to metals. H314 Causes severe skin burns and eye damage. H318 Causes serious eye damage. H332 Harmful if inhaled. H335 May cause respiratory irritation.
Precautionary statements	 Prevention: P234 Keep only in original container. P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray. P264 Wash skin thoroughly after handling. P271 Use only outdoors or in a well-ventilated area. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. Response: P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. P304 + P340 + P310 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor/ physician. P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTEL or doctor/ physician. P312 Call a POISON CENTER or doctor/ physician if you feel unwell. P363 Wash contaminated clothing before reuse. P390 Absorb spillage to prevent material damage. Storage: P403 + P233 Store in a well-ventilated place. Keep container tightly closed. P406 Store locked up. P406 Store in corrosive resistant stainless steel container with a resistant inner liner. Disposal: P501 Dispose of contents/ container to an approved waste disposal plant.
Other hazards	

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

CAS OR CHEMICAL NAME SULFURIC ACID	<u>CAS #</u> 7664-93-9	<u>% RANGE</u> 10 - 16
HYDROCHLORIC ACID	7647-01-0	4 - 10
PHOSPHORIC ACID	7664-38-2	5 - 11
Polyoxyethylene octyl phenyl ether	9002-93-1	1 - 3

SECTION 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 required equivalence.
Skin Contact:	respiration. Call for medical assistance. 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 if irritation develops.
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
Notes to Physician:	person. Probable mucosal damage may contraindicate the use of gastric lavage.

SECTION 5. FIREFIGHTING MEASURES

Flammability Summary (OSHA):	Product is not known to be flammable, combustible, pyrophoric or explosive.
Flammable Properties	
Fire / Explosion Hazards:	Material will not ignite or burn. Reacts with most metals to form flammable hydrogen gas.
Extinguishing Media:	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Fire Fighting Instructions:	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. Use water spray to cool unopened containers.
GLB TLC	

Hazardous Combustion Products:

During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

SECTION 6. ACCIDENTAL RELEASE MEASURES

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.
Spill Mitigation Procedures	
Air Release:	Keep people away from and upwind of spill/leak.
Water Release:	If the product contaminates rivers and lakes or drains inform respective authorities.soluble
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. Remove all sources of ignition.

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: Empty Container Warning:	Refer to Section 10, "Incompatible Materials." Empty containers retain hazardous residue, dispose of accordingly.

SECTION 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., A NIOSH approved full-face air purifying respirator with acid gas cartridge and N-95 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 Boots Apron 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:	Neoprene, Butyl rubber, Natural rubber
General Protective Measures:	Ensure that eyewash stations and safety showers are close to the workstation location.

Components with workplace control parameters

Components (CAS-No.)	Value	Control parameters	Basis (Update)
SULFURIC ACID (7664-93-9)	TWA	0.2 mg/m3	ACGIH (02 2014)
HYDROCHLORIC ACID (7647-01-0)		2 ppm	ACGIH (02 2014)
PHOSPHORIC ACID (7664-38-2)	TWA	1 mg/m3	ACGIH (02 2014)
	STEL	3 mg/m3	ACGIH (02 2014)

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Form Color: Odor: Molecular Weight: pH : Boiling Point:	liquid liquid amber mild None established 0.0 - 2.0 () 212 °F (100 °C)
Melting point/freezing point Density	No data No data.
Bulk Density:	()
Vapor Pressure: Vapor Density:	no data available no data available > 1
Viscosity: Solubility in Water: Partition coefficient n- octanol/water: Evaporation Rate:	no data available soluble in cold water No data No data

Oxidizing:	None established
Volatiles, % by vol.: VOC Content	no data available 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.
HAP Content	No data

SECTION 10. STABILITY AND REACTIVITY

Stability and Reactivity Summary:	Stable under normal conditions.
Conditions to Avoid:	Heat, flames and sparks.
Chemical Incompatibility:	Strong oxidizing agents, Bases, Amines, Metals, alkalis
Hazardous Decomposition Products:	Hydrogen chloride
Decomposition Temperature:	No data

SECTION 11. TOXICOLOGICAL INFORMATION

Component Animal	Toxicology
	•

Oral LD50 value:		
SULFURIC ACID	LD50 = 2,140 mg/kg	Rat
HYDROCHLORIC ACID	LD50 900 mg/kg Ra	abbit
PHOSPHORIC ACID	LD50 = 1,530 mg/kg	Rat
Polyoxyethylene octyl phenyl ether	LD50 = 4,500 mg/kg	Rat
<u>Component Animal Toxic</u> Dermal LD50 value:	<u>ology</u>	
SULFURIC ACID	LD50 > 2,000 mg/kg	Rabbit
HYDROCHLORIC ACID	No data	
PHOSPHORIC ACID	LD50 = 2,740 mg/kg	Rabbit
Polyoxyethylene octyl phenyl ether	no data available	
Component Animal Toxic Inhalation LC50 value:	ology	
SULFURIC ACID	LC50 1 h (aerosol) =	1.02 mg/l Rat
HYDROCHLORIC ACID	Inhalation LC50 1 h	3124 ppm Rat
PHOSPHORIC ACID	Inhalation LC50 1 h >	0.850 mg/l Rat
Polyoxyethylene octyl phenyl ether	no data available	

Product Animal Toxicity Oral LD50 value: Dermal LD50 value: Inhalation LC50 value: Skin Irritation: Eye Irritation: Skin Sensitization:	LD50 Believed to be a LD50 Believed to be > no data available Corrosive to skin Corrosive to eyes	approximately 4,800 mg/kg Rat > 2,000 mg/kg Rabbit wn or reported to be a skin or respiratory sensitizer.		
Acute Toxicity: Subchronic / Chronic Toxicity:	irritation to mucous men	is product is corrosive to all tissues contacted and upon inhalation, may cause tation to mucous membranes and respiratory tract. ere are no known or reported effects from repeated exposure except those condary to burns.		
Reproductive and Developmental Toxicity		rted to cause reproductive or developmental toxicity.		
SULFURIC A	CID	This product did not cause reproductive or developmental effects in a study with laboratory animals.		
PHOSPHORI	C ACID	This material has been tested and was found not to cause reproductive toxicity in laboratory animals.		
Mutagenicity:	Not known or repo	rted to be mutagenic.		
SULFURIC A	•	This product has been tested for mutagenicity. Tests revealed both positive and negative results. Based on the weight of evidence, we judge this product NOT to be a mutagenic hazard.		
HYDROCHLO	CHLORIC ACID This chemical has been shown to be non-mutagenic based on a battery of assays.			
PHOSPHORI	C ACID	This product was determined to be non-mutagenic in the Ames assay.		
Carcinogenicity:	source including IA Research on Canc that occupational e	known or reported to be carcinogenic by any reference ARC, OSHA, NTP or EPA. The International Agency for er (IARC) has determined that there is sufficient evidence exposure to strong inorganic acid mists containing sulfuric ic (Group I carcinogen). The following data is available for		
SULFURIC A	CID	This chemical is not known or reported to be carcinogenic by any reference source including IARC, OSHA, NTP, or EPA. IARC evaluated several epidemiology studies where workers from a variety of industries had been exposed to a mixture of strong inorganic acid mists. IARC has concluded that there is sufficient evidence that occupational exposure to a mixture of strong inorganic-acid mists containing sulfuric acid is carcinogenic to humans (Group I carcinogen). Because cancer has not been observed in animals when they are exposed only to sulfuric acid mists, exposure to sulfuric acid by itself was not determined to be carcinogenic to humans.		

HYDROCHLORIC ACID	The International Agency for Research on Cancer (IARC) has classified this product or a component of this product as a Group 3 substance, Unclassifiable as to Its Carcinogenicity to Humans.
PHOSPHORIC ACID	This chemical is not known or reported to be carcinogenic by any reference source including IARC, OSHA, NTP, or EPA.

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SECTION 12. ECOLOGICAL INFORMATION

Overview: Because of the low pH of this product, it would be expected to produce significant ecotoxicity upon exposure to aquatic organisms and aquatic systems., No data for product. Individual constituents are as follows:

Ecological Toxicity Values for: SULFURIC ACID

Bluegill sunfish Common shrimp (Crangon	-	(nominal, static). 96 h LC50 42 mg/l 96 h LC50 10.5 mg/l (nominal, renewal). 48 h LC50 70-80 mg/l
crangon) Daphnia magna,	-	24 h EC50 29 mg/l

Ecological Toxicity Values for: HYDROCHLORIC ACID

-	96 h LC50 = 282 mg/l
-	48 h LC50 = 3.6 mg/l
-	96 h LC50 = 21.9 mg/l
-	(nominal, renewal). 48 h LC50= 260 mg/l
-	48 h EC50= 0.492 mg/l
	-

Ecological Toxicity Values for: PHOSPHORIC ACID

Mosquito fish - 96 h LC50 138 mg/l

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 meets the criteria of a hazardous waste as defined under 40 CFR 261 and would have the following EPA hazardous waste number: D002.As a hazardous liquid waste it must be disposed of in accordance with local, state and federal regulations.

SECTION 14. TRANSPORT INFORMATION

DOT UN number Description of the goods Class Packing group Labels Emergency Response Guidebook Number	 1760 Corrosive liquids, n.o.s. (Sulphuric acid, hydrochloric acid) 8 II 8 154
TDG UN number Description of the goods Class Packing group Labels	 1760 CORROSIVE LIQUID, N.O.S. (Sulphuric acid, hydrochloric acid) 8 II 8
IATA UN number Description of the goods Class Packing group Labels Packing instruction (cargo aircraft) Packing instruction (passenger aircraft) Packing instruction (passenger aircraft)	 1760 Corrosive liquid, n.o.s. (Sulphuric acid, hydrochloric acid) 8 II 8 855 851 Y840
IMDG-CODE UN number Description of the goods Class Packing group Labels EmS Number 1	 1760 CORROSIVE LIQUID, N.O.S. (Sulphuric acid) 8 II 8 F-A P-A

EmS Number 2

: S-B

SECTION 15. REGULATORY INFORMATION

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

CERCLA Reportable Quantity

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
Sulphuric acid	7664-93-9	1000	

SARA 302

The following components are subject to reporting levels established by SARA Title III, Section 302:

Sulphuric acid 7664-93-9 hydrochloric acid 7647-01-0

SARA 313

The following components are subject to reporting levels established by SARA Title III, Section 313:

Sulphuric acid	7664-93-9	
hydrochloric acid	7647-01-0	

Clean Air Act

The following chemical(s) are listed as HAP under the U.S. Clean Air Act, Section 12 (40 CFR 61):

hydrochloric acid	7647-01-0	7.56 %

The following chemical(s) are listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F):

Sulphuric acid	7664-93-9	13.95 %
hydrochloric acid	7647-01-0	7.56 %

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).

Clean Water Act

The following Hazardous Substances are listed under the U.S. CleanWater Act, Section 311, Table 116.4A:

Sulphuric acid hydrochloric acid	7664-93-9 7647-01-0	13.95 % 7.56 %
 phosphoric acid	7664-38-2	8.33 %

The following Hazardous Chemicals are listed under the U.S. CleanWater Act, Section 311, Table 117.3:

Sulphuric acid	7664-93-9	13.95 %
hydrochloric acid	7647-01-0	7.56 %
phosphoric acid	7664-38-2	8.33 %

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

phosphoric acid hydrochloric acid7664-38-2 7647-01-0Pennsylvania Right To KnowSulphuric acid phosphoric acid hydrochloric acid7664-93-9 7664-38-2 hydrochloric acid 7647-01-0New Jersey Right To KnowSulphuric acid 7664-93-9 phosphoric acid phosphoric acid 7664-93-9 7664-38-2 hydrochloric acid Polyoxyethylene octyl phosphoril ether9002-93-1 9002-93-1		Sulphuric acid	7664-93-9
Pennsylvania Right To KnowSulphuric acid phosphoric acid hydrochloric acid7664-93-9 7647-01-0New Jersey Right To KnowSulphuric acid phosphoric acid7664-93-9 7647-01-0New Jersey Right To KnowSulphuric acid phosphoric acid phosphoric acid7664-93-9 7664-38-2 7647-01-0New Jersey Right To KnowSulphuric acid phosphoric acid phosphoric acid 7664-93-9 phosphoric acid phosphoric acid 9002-93-1		phosphoric acid	7664-38-2
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New Jersey Right To Know Sulphuric acid 7664-93-9 phosphoric acid 7664-38-2 hydrochloric acid 7647-01-0 Polyoxyethylene octyl 9002-93-1		phosphoric acid	7664-38-2
Sulphuric acid 7664-93-9 phosphoric acid 7664-38-2 hydrochloric acid 7647-01-0 Polyoxyethylene octyl 9002-93-1		hydrochloric acid	7647-01-0
phosphoric acid 7664-38-2 hydrochloric acid 7647-01-0 Polyoxyethylene octyl 9002-93-1	New Jersey Right To Know		
hydrochloric acid 7647-01-0 Polyoxyethylene octyl 9002-93-1		Sulphuric acid	7664-93-9
Polyoxyethylene octyl 9002-93-1		phosphoric acid	7664-38-2
		hydrochloric acid	7647-01-0
phenyl ether		Polyoxyethylene octyl	9002-93-1
		phenyl ether	

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	: The components of this product are listed on the TSCA
	Inventory of Existing Chemical Substances.

Inventories

AICS (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECI (Korea), NZIOC (New Zealand), PICCS (Philippines), TSCA (USA)

SECTION 16. OTHER INFORMATION

SECTIONS REVISED: Major References : First formulated version in SAP. Available upon request.

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