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 CALCIUM HARDNESS UP

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

<u>Supplier</u> GLB 1400 Bluegrass Lakes Parkway , Alpharetta, GA, 30004 USA

Telephone: +17705215999 Telefax: +17705215959 Web: www.poolspacare.com

Manufacturer Advantis Technologies 1200 Bluegrass Lakes Parkway Alpharetta, GA 30004 United States of America REVISION DATE: SUPERCEDES:

02/12/2016 05/26/2015

MSDS Number: SYNONYMS: CHEMICAL FAMILY: DESCRIPTION / USE FORMULA: 00000024502

None Water treatment chemical None established

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification Acute toxicity (Oral)	:	Category 4
Skin irritation	:	Category 2
Eye irritation	:	Category 2A
GHS label elements Hazard pictograms	:	

Signal word	:	Warning
Hazard statements	:	H302 Harmful if swallowed. H315 Causes skin irritation. H319 Causes serious eye irritation.
Precautionary statements	:	 Prevention: P264 Wash hands thoroughly after handling. P270 Do not eat, drink or smoke when using this product. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. Response: P301 + P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. P330 Rinse mouth. P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. P363 Wash contaminated clothing before reuse. P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. P310 Immediately call a POISON CENTER/doctor. P321 Specific treatment (see supplemental first aid instructions on this label). P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

CAS OR CHEMICAL NAME CALCIUM CHLORIDE	<u>CAS #</u> 10043-52-4	<u>% RANGE</u> 94 - 100
POTASSIUM CHLORIDE (KCL)	7447-40-7	2 - 4
SODIUM CHLORIDE	7647-14-5	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.

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.

SECTION 5. FIREFIGHTING MEASURES

Flammability Summary (OSHA):	Product is not known to be flammable, combustible, pyrophoric or explosive.
<u>Flammable Properties</u> Flash Point: Fire / Explosion Hazards:	Not applicable Material will not ignite or 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.
Upper Flammable / Explosive Limit, % in air:	Not applicable
Lower Flammable / Explosive Limit, % in air:	Not applicable

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:	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 creating dust.
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 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."

SECTION 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 : Eye Protection: Protective Clothing Type: General Protective Measures:	Impervious gloves Use chemical goggles. Impervious clothing Emergency eyewash should be provided in the immediate work area.

Components with workplace control parameters

no data available

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Form Color: Odor: Molecular Weight: pH : Boiling Point:	solid <** Phrase does not exist: LONZA - SX0900048460 **> <** Phrase does not exist: LONZA - SX0900048460 **> <** Phrase does not exist: LONZA - SX0900048460 **> None established 9.0 - 11.0 () 10 g/l (as aqueous solution) 388.0 °F (197.8 °C)
Melting point/freezing point	no data available
Density	Not applicable
Bulk Density:	() no data available
Vapor Pressure:	0.012 hPa 68 °F (20 °C)
Vapor Density:	Not applicable

Viscosity: Solubility in Water: Partition coefficient n- octanol/water:	no data available no data available soluble in cold water no data available
Evaporation Rate:	Not applicable
Oxidizing:	None established
Volatiles, % by vol.:	Not applicable
VOC Content	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	Not applicable

SECTION 10. STABILITY AND REACTIVITY

Stability and Reactivity Summary: Stable under r hazardous po	ormal conditions., Product will not undergo ymerization.
1 3	e to moisture e., Acids, Metals decomposition products are known.

SECTION 11. TOXICOLOGICAL INFORMATION

Component Animal Toxico Oral LD50 value:	<u>ology</u>		
CALCIUM CHLORIDE	LD50	= 1,000 mg/kg	Rat
POTASSIUM CHLORIDE (KCL)	LD50	= 2,600 mg/kg	Rat
SODIUM CHLORIDE	LD50	= 3,000 mg/kg	Rat
Component Animal Toxico Dermal LD50 value:	<u>ology</u>		
CALCIUM CHLORIDE	LD50	= 2,630 mg/kg	Rat
POTASSIUM CHLORIDE (KCL)	no da	ta available	
SODIUM CHLORIDE	LD50	> 10,000 mg/kg	Rabbit
<u>Component Animal Toxicology</u> <u>Inhalation LC50 value</u> :			
CALCIUM CHLORIDE	no d	ata available	
POTASSIUM CHLORIDE (KCL)	no d	ata available	
SODIUM CHLORIDE	Inhalat	ion LC50 1 h >	42 mg/l Rat

Product Animal Toxicity Oral LD50 value: Dermal LD50 value: Inhalation LC50 value:	LD50 Believed to be LD50 Believed to be LC50 no data availab		Rat
Skin Irritation:	This material is expected to be slightly irritating.		
Eye Irritation: Skin Sensitization:	Moderate to Severe Eye Irritant This material is not known or reported to be a skin or respiratory sensitizer.		
Acute Toxicity:	Powder can cause irritation to eyes, skin & respiratory tract. Liquid solution can cause burns to the skin and eyes.		
Subchronic / Chronic Toxicity:	nic / Chronic Not known or reported to cause subchronic or chronic toxicity.		
Reproductive and Not known or reported to cause reproductive or developmental toxicity.			
CALCIUM CH	ILORIDE	Not known or reported to c developmental toxicity.	ause reproductive or
Mutagenicity: Not known or reported to be mutagenic.			
CALCIUM CHLORIDE		This product was determin the Ames assay. It was als clastogenic in the chromos	so shown to be non-
POTASSIUM CHLORIDE (KCL)		This product has been test revealed both positive and	ted for mutagenicity. Tests negative results.
Carcinogenicity:		t known or reported to be car ARC, OSHA, NTP or EPA.	cinogenic by any reference
CALCIUM CHLORIDE This chemical is not known or reported to be carcinogenic by any reference source including OSHA, NTP, or EPA.			

SECTION 12. ECOLOGICAL INFORMATION

Overview:

This product is expected to have low toxicity to fish and other aquatic organisms.

Ecological Toxicity Values for: CALCIUM CHLORIDE

Bluegill Mosquito fish Pimephales promelas (fathead minnow)	-	(nominal, static). 96 h LC50 = 10,650 mg/l (nominal, static). 96 h LC50 = 13,400 mg/l (nominal, static). 96 h LC50 = 4,630 mg/l
Daphnia magna, Ceriodaphnia dubia Nitzschia linearis (diatom)	-	(nominal, static). 48 h LC50= 2,770 mg/l (nominal, static). 48 h LC50= 1,830 mg/l (nominal, static). 5 day LC50 = 3,130 mg/l

Ecological Toxicity Values for: POTASSIUM CHLORIDE (KCL)

static test 96 h LC50 = 920 mg/l
static test 96 h LC50 = 2,010 mg/l

Daphnia magna (Water flea) - 48 h EC50= 825 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 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.

SECTION 14. TRANSPORT INFORMATION

DOT Not dangerous goods

TDG Not dangerous goods

IATA Not dangerous goods

IMDG-CODE Not dangerous goods

SECTION 15. REGULATORY INFORMATION

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

CERCLA Reportable Quantity

This material does not contain any components with a CERCLA RQ.

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

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 112 (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 SOCMI 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

No components are subject to the Massachusetts Right to
Know Act.Pennsylvania Right To KnowCalcium chloride
Potassium chloride10043-52-4
7447-40-7New Jersey Right To KnowCalcium chloride
Potassium chloride10043-52-4
7447-40-7

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:

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), TCSI (Taiwan), 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.