

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

FOR ALL TRANSPORTATION ACCIDENTS, CALL CHEMTREC®:

FOR ALL MSDS 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

1. PRODUCT AND COMPANY IDENTIFICATION

<u>Supplier</u> GLB	REVISION DATE: SUPERCEDES:	10/27/2010 05/28/2009
1400 Bluegrass Lakes Parkway , Alpharetta, GA, 30004		
United States	MSDS Number: SYNONYMS:	00000012588
Telephone: +17705215999 Telefax: +17705215959	CHEMICAL FAMILY: DESCRIPTION / USE	None None established
Web: www.poospacare.com	FORMULA:	None established
<u>Manufacturer</u> Advantis Tochnologies		

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

2. HAZARDS IDENTIFICATION

OSHA Hazard Classification:	Eye irritant, Mild skin irritant, Mild respiratory irritant	
Routes of Entry: Chemical Interactions: Medical Conditions Ag		



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

Hazard Ratings :	<u>Health</u>	Flammability	Physical / Instability	<u>PPI / Special</u> hazard.
HMIS	2	0	1	<u>nazaru.</u>
NFPA	2	0	1	

Immediate (Acute) Health Effects

Inhalation Toxicity:	Dust may be irritating to respiratory tract. If inhaled, mild irritation may result to the throat, upper respiratory tract, and lungs. Any irritation would be transient with no permanent damage expected.
Skin Toxicity:	Not expected to be toxic from dermal contact. Skin contact may cause minor irritation consisting of transient redness and/or swelling. This irritant effect would not be expected to result in permanent damage.
Eye Toxicity:	Contact with the eyes would be expected to cause moderate to severe irritation consisting of redness, swelling, and mucous discharge to the conjunctiva. Corneal injury with impairment of vision may occur. If not immediately rinsed from the eyes, thermal burns may occur because of the heat given off as it dissolves.
Ingestion Toxicity:	Moderately toxic if swallowed. Ingestion may cause irritation of the gastrointestinal tract and gastrointestinal discomfort with any or all of the following symptoms: nausea, vomiting or diarrhea. Ulceration may also occur resulting in G.I. bleeding.
Acute Target Organ Toxicity:	Powder can cause irritation to eyes, skin & respiratory tract. Liquid solution can cause burns to the skin and eyes.

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	Not known or reported to cause reproductive or developmental toxicity.
Developmental Toxicity:	
Inhalation:	Prolonged or repeated exposure may cause more severe irritation.
Skin Contact:	Prolonged contact may cause burns especially if skin is damp and/or abraded. When dissolving, the heat produced may cause more intense effects as well as thermal burns.
Ingestion:	More pronounced gastroenteritis effects and damage to the stomach would probably occur if this material is repeatedly ingested.



Eye Contact:	Prolonged contact may result in permanent damage. Corneal involvement or visual impairment is expected.
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 target organ effects from chronic exposure.
Supplemental Health Hazard	No additional health information available.

3. COMPOSITION / INFORMATION ON INGREDIENTS

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

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.



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: Extinguishing Media:	Will not burn 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.

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:	solublelf the product contaminates rivers and lakes or drains inform respective authorities.
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.

7. HANDLING AND STORAGE

Handling:

Storage:

Do not take internally. Avoid contact with skin, eyes and clothing. If in eyes or on skin, rinse well with water. Avoid breathing dust. Store in a cool, dry and well ventilated place. Isolate from incompatible materials. Refer to Section 10, "Incompatible Materials."

Incompatible Materials for Storage:



8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Ventilation:	Local exhaust ventilation is recommended if significant dusting occurs. Otherwise use general exhaust ventilation.	
Protective Equipment for Ro	utine Use of Product	
Respiratory Protection : Skin Protection : Eye Protection: Protective Clothing Type: General Protective Measures:	Respiratory protection not normally needed., If dusting occurs, wear a NIOSH approved N95 dust respirator. Impervious gloves Use chemical goggles. impervious clothing Emergency eyewash should be provided in the immediate work area.	
Exposure Limit Data		
CHEMICAL NAME No Data Found	CAS # Name of Limit Exposure	

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Form Color: Odor: Molecular Weight: Specific Gravity : pH : Boiling Point:	solid No data. No data. None established not applicable 9.0 - 11.0 10 g/l (as aqueous solution) 197.8 °C 388 °F
Freezing Point:	
Melting Point:	no data available
Density: Bulk Density: Vapor Pressure: Vapor Density: Viscosity: Solubility in Water: Partition coefficient n- octanol/water:	no data available not applicable no data available 0.012 hPa 20 °C not applicable no data available no data available soluble in cold water Not applicable



Evaporation Rate: Oxidizing: Volatiles, % by vol.: VOC Content HAP Content not applicable None established not applicable no data available Not applicable

10. STABILITY AND REACTIVITY

Stability and Reactivity Summary: Conditions to Avoid: Chemical Incompatibility: Hazardous Decomposition Products: Decomposition Temperature: Stable under normal conditions. Heat., Exposure to moisture. Avoid moisture., Acids, Metals No hazardous decomposition products are known. No data

11. TOXICOLOGICAL INFORMATION

Component Animal Toxi	icology	
Oral LD50 value: CALCIUM CHLORIDE	LD50 = 1,000 mg/kg Rat	
POTASSIUM CHLORIDE	LD50 = 2,600 mg/kg Rat	
(KCL) SODIUM CHLORIDE	LD50 = 3,000 mg/kg Rat	
Component Animal Toxi	icology	
Dermal LD50 value: CALCIUM CHLORIDE	LD50 = 2,630 mg/kg Rat	
POTASSIUM CHLORIDE	No data	
(KCL) SODIUM CHLORIDE	LD50 > 10,000 mg/kg Rabbit	
Component Animal Toxi Inhalation LC50 value:	icology	
CALCIUM CHLORIDE	No data	
POTASSIUM CHLORIDE	No data	
(KCL) SODIUM CHLORIDE	Inhalation LC50 1 h > 42 MG/L Rat	
Product Animal Toxicity Oral LD50 value:	LD50 Believed to be approximately 1,000 mg/kg rat	
Dermal LD50 value:	LD50 Believed to be approximately 1,000 mg/kg rat	
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Inhalation LC50 value:	LC50 no data available	LC50 no data available		
Skin Irritation: Eye Irritation: Skin Sensitization:	Moderate to Severe Eye	This material is expected to be slightly irritating. Aoderate to Severe Eye Irritant This material is not known or reported to be a skin or respiratory sensitizer.		
Acute Toxicity:	Powder can cause irritat cause burns to the skin a	ion to eyes, skin & respiratory tract. Liquid solution can		
Subchronic / Chronic Toxicity:		o cause subchronic or chronic toxicity.		
Reproductive and Developmental Toxicity		ted to cause reproductive or developmental toxicity.		
CALCIUM CHL	ORIDE	Not known or reported to cause reproductive or developmental toxicity.		
Mutagenicity: CALCIUM CHL		ted to be mutagenic. 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.		
POTASSIUM C	HLORIDE (KCL)	This product has been tested for mutagenicity. Tests revealed both positive and negative results.		
Carcinogenicity: CALCIUM CHL	source including IA	known or reported to be carcinogenic by any reference RC, OSHA, NTP or EPA. This chemical is not known or reported to be carcinogenic by any reference source including IARC, OSHA, NTP, or EPA.		
CALCIUM CHL Mutagenicity: CALCIUM CHL POTASSIUM C Carcinogenicity:	ORIDE Not known or repor ORIDE HLORIDE (KCL) This product is not source including IA	developmental toxicity. ted to be mutagenic. 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. This product has been tested for mutagenicity. Tests revealed both positive and negative results. known or reported to be carcinogenic by any reference RC, OSHA, NTP or EPA. This chemical is not known or reported to be		

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 Fathead minnow (Pimephales promelas),	-	(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)

Gambusia affinis (Mosquito fish)	-	static test 96 h LC50 = 920 mg/l
Lepomis macrochirus (Bluegill	-	static test 96 h LC50 = 2,010 mg/l
sunfish)		
Daphnia magna (Water flea)	-	48 h EC50= 825 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.

Potential US EPA Waste Codes : not applicable

14. TRANSPORT INFORMATION

Land (US DOT): Not Regulated NOT REGULATED AS A DOT HAZARDOUS MATERIAL NOT REGULATED AS A HAZARDOUS MATERIAL,

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

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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 Hazardou	s Substance Section 302 -	Threshold Planning Quantity:
ZUS_SAR302	TPQ (threshold planning	None established

1302	
	quantity)

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 A CAA 112R	ARP Section 112r: None established	
Clean Air Act Socmi HON SOC	None established	
Clean Air Act VOC S CAA 111	ection 111: None established	
Clean Air Act Haz. Ai ZUS_CAAHAP	r Pollutants Section 112: None established	
ZUS_CAAHRP	None established	

CAA AP None established

State Right-to-Know Regulations Status of Ingredients

Pennsylvania:

CAS #	COMPONENT NAME	
ZUSPA_RTK	None established	
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New Jersey:	
CAS #	COMPONENT NAME
ZUSNJ_RTK	None established

Massachusetts:

CAS #	COMPONENT NAME	
ZUSMA_RTK	None established	

California Proposition 65:

CAS #	COMPONENT NAME			
ZUSCA_P65	None established			

WHMIS Hazard Classification:

None established

16. OTHER INFORMATION

MSDS REVISION STATUS : SECTIONS REVISED: Major References :

First formulated version in SAP. 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.