

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: QUANTUM CALCIUM HARDNESS UP****1. PRODUCT AND COMPANY IDENTIFICATION****Supplier****Quantum Biochemical
1400 Bluegrass Lakes Parkway ,
Alpharetta, GA, 30004
United States****Telephone: +17705215999****Telefax: +17705215959****Web: www.poospacare.com**

REVISION DATE:

10/27/2010

SUPERCEDES:

05/28/2009

MSDS Number:

000000012588

SYNONYMS:

CHEMICAL FAMILY:

None

DESCRIPTION / USE

None established

FORMULA:

None established

Manufacturer**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:

Inhalation Skin Eyes Ingestion

Chemical Interactions:

No known or reported interactions.

Medical Conditions Aggravated:

None known or reported

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	2	0	1	
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 Developmental Toxicity:	Not known or reported to cause reproductive or 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 Information : No additional health information available.

3. COMPOSITION / INFORMATION ON INGREDIENTS

<u>CAS OR CHEMICAL NAME</u>	<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: Will not 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.

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: solubleIf 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: 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."

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 : Impervious gloves
 Eye Protection: Use chemical goggles.
 Protective Clothing Type: impervious clothing
 General Protective Measures: Emergency eyewash 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>
No Data Found			

9. PHYSICAL AND CHEMICAL PROPERTIES

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

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

10. STABILITY AND REACTIVITY

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

11. TOXICOLOGICAL INFORMATION

Component Animal Toxicology

Oral LD50 value:

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 Toxicology

Dermal LD50 value:

CALCIUM CHLORIDE	LD50	= 2,630 mg/kg	Rat
POTASSIUM CHLORIDE (KCL)	No data		
SODIUM CHLORIDE	LD50	> 10,000 mg/kg	Rabbit

Component Animal Toxicology

Inhalation LC50 value:

CALCIUM CHLORIDE	No data		
POTASSIUM CHLORIDE (KCL)	No data		
SODIUM CHLORIDE	Inhalation LC50 1 h	> 42 MG/L	Rat

Product Animal Toxicity

<u>Oral LD50 value:</u>	LD50	Believed to be approximately 1,000 mg/kg	rat
<u>Dermal LD50 value:</u>	LD50	Believed to be > 2,000 mg/kg	rat

<u>Inhalation LC50 value:</u>	LC50 no data available
Skin Irritation:	This material is expected to be slightly irritating.
Eye Irritation:	Moderate to Severe Eye Irritant
Skin Sensitization:	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:	Not known or reported to cause subchronic or chronic toxicity.
Reproductive and Developmental Toxicity:	Not known or reported to cause reproductive or developmental toxicity.
CALCIUM CHLORIDE	Not known or reported to cause reproductive or developmental toxicity.
Mutagenicity:	Not known or reported to be mutagenic.
CALCIUM CHLORIDE	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 CHLORIDE (KCL)	This product has been tested for mutagenicity. Tests revealed both positive and negative results.
Carcinogenicity:	This product is not known or reported to be carcinogenic by any reference source including IARC, OSHA, NTP or EPA.
CALCIUM CHLORIDE	This chemical is not known or reported to be carcinogenic by any reference source including IARC, OSHA, NTP, or EPA.

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	- (nominal, static). 96 h LC50 = 10,650 mg/l
Mosquito fish	- (nominal, static). 96 h LC50 = 13,400 mg/l
Fathead minnow (Pimephales promelas),	- (nominal, static). 96 h LC50 = 4,630 mg/l
Daphnia magna,	- (nominal, static). 48 h LC50= 2,770 mg/l
Ceriodaphnia dubia	- (nominal, static). 48 h LC50= 1,830 mg/l
Nitzschia linearis (diatom)	- (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 sunfish) - static test 96 h LC50 = 2,010 mg/l
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
Water (IMDG): 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

FIFRA Listing of Pesticide Chemicals Not registered in the US under FIFRA.
(40 CFR 180):

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
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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
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Clean Air Act Toxic ARP Section 112r:

CAA 112R	None established
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Clean Air Act Socmi:

HON SOC	None established
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Clean Air Act VOC Section 111:

CAA 111	None established
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Clean Air Act Haz. Air Pollutants Section 112:

ZUS_CAAHAP	None established
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ZUS_CAAHRP	None established
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CAA AP	None established
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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: First formulated version in SAP.

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. .