



PRODUCT NAME: CALCIUM HARDNESS INCREASER
Revision date: 06/20/2013

SECTION 1 IDENTIFICATION

Supplier: Phoenix Product Company
55 Container Drive
Terryville, CT 06786
(860) 589-7502
Distributor: ESSENTIALS
5070 Wallace Drive
Cumming, GA 30041
(626) 305-1182

U.S. PERS Emergency Telephone 1-800-633-8253

SECTION 2 COMPOSITION, INFORMATION ON INGREDIENTS

<u>Chemical or Common Name:</u>	<u>CAS #</u>	<u>Wt. %</u>
Calcium chloride	10043-52-4	20 - 30
Sodium chloride	7647-14-5	0 - 1
Potassium chloride	7-40-7	0 - 1
Water	7732-18-5	70 - 80
Strontium chloride	10476-85-4	0 - 1

SECTION 3 HAZARDS IDENTIFICATION

Medical Conditions Aggravated: None known.

Human Threshold Response Data

Odor Threshold Not established for product.

Irritation Threshold Not established for product.

Immediate (Acute) Health Effects

Inhalation Toxicity: Not expected to be an inhalation hazard at ambient conditions. Inhalation of mist or vapor may cause irritation to the mucous membranes of the respiratory tract. Any irritation would be transient with no permanent damage expected.

Skin Toxicity: May cause skin irritation. Not expected to be toxic from dermal contact.

Eye Toxicity: May cause eye irritation. No corneal involvement or visual impairment is expected.

Ingestion Toxicity: May be slightly toxic if swallowed. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Acute Target Organ Toxicity: May cause mild skin and eye irritation. Ingestion may cause mild gastrointestinal discomfort., Inhalation of mist or vapor may cause irritation to the mucous membranes of the 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.

SECTION 4 FIRST-AID MEASURES

IF INHALED: Remove individual to fresh air. Seek medical attention if breathing becomes difficult or if respiratory irritation develops.

IF ON SKIN: Flush skin with water for 15 minutes. Take off all contaminated clothing. Seek medical attention if irritation develops.

IF IN EYES: Flush eyes with plenty of water for at least 15 minutes. Seek medical attention if irritation develops

IF SWALLOWED: Immediately drink water to dilute. Seek medical attention if symptoms develop. Never give anything by mouth to an unconscious person.

SECTION 5 FIRE FIGHTING MEASURES

Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Special Fire Fighting Procedures

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.

Fire/Explosion Hazards: Will Not burn.

SECTION 6 ACCIDENTAL RELEASE MEASURES

GENERAL PROCEDURES: STEP TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Utilizing appropriate clothing and safety equipment, contain spill material. Cover the liquid with an inert absorbent. Using clean, dedicated equipment, sweep and scoop all spilled material, contaminated soil, and other contaminated material and place into clean dry plastic containers for disposal. Dispose of according to local, state and federal regulations.

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: No exposure limits exist for the constituents of this product. Additional ventilation beyond that of general exhaust is not normally required.

Protective Equipment for Routine Use of Product

Respiratory Protection : Respiratory protection not normally needed., If vapors, mists or aerosols are generated, wear a NIOSH approved respirator., Wear a NIOSH approved N95 respirator.

Skin Protection : Impervious gloves

Eye Protection: Safety glasses with side-shields

Protective Clothing Type: Impervious clothing

General Protective Measures: Emergency eyewash should be provided in the immediate work area.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Liquid – Clear

Odor: Odorless.

Color: Clear

Solubility in water: Soluble

pH: 7.5 to 8.5

Boiling Point: ~(212°F)

Vapor Density (Air=1): Not Applicable

Vapor Pressure (mm Hg): Not Applicable

Specific Gravity: 2.2g/cc @ 25° C

SECTION 10 STABILITY AND REACTIVITY

Stability and Reactivity Summary: Stable under normal conditions.

Conditions to Avoid: Heat.

Chemical Incompatibility: Strong acids, Metals

Hazardous Decomposition Products: Hydrogen chloride gas.

Decomposition Temperature: No data

SECTION 11 TOXICOLOGICAL INFORMATIONComponent Animal ToxicologyOral LD50 value:

CALCIUM CHLORIDE LD50 = 1,000 mg/kg Rat

Component Animal ToxicologyDermal LD50 value:

CALCIUM CHLORIDE LD50 = 2,630 mg/kg Rat

Component Animal ToxicologyInhalation LC50 value:

CALCIUM CHLORIDE No data

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 nonclastogenic in the chromosomal aberration test.

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.

SECTION 12 ECOLOGICAL INFORMATION

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

SECTION 13 DISPOSAL CONSIDERATIONS

Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

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 TRANSPORTATION DATA

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.



SECTION 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
------------	-----------------------------------	------------------

Reportable Quantity (49 CFR 172.101, Appendix):

ZUS_CERCLA Reportable quantity	None established
ZUS_SAR302 Reportable quantity	None established

SECTION 16 ADDITIONAL INFORMATION

HMIS: Health: 1 Flammability: 0 Reactivity: 0
NFPA Ratings: Health: 1 Flammability: 0 Reactivity: 0

No representations or warranties, either expressed or implied, of merchant ability, fitness for a particular purpose or any other nature are made hereunder with respect to information or the product to which information refers.

END OF MATERIAL SAFETY DATA SHEET
Revision 6/20/2013