

## I - PRODUCT IDENTIFICATION

Product: Calcium Hardness Reducer  
Chemical Family:  
Formula: Proprietary  
CAS Number: N/A  
Synonyms:

### COMPANY IDENTIFICATION

AllChem Performance Products  
6010 NW First Place  
Gainesville, FL 32607  
Tel:352-378-9696

### 24 HR EMERGENCY TELEPHONE NUMBER

INFOTRAC (Transportation): (800)535-5053

## II – COMPOSITION, INFORMATION ON INGREDIENTS

<u>Chemical or Common Name:</u>	<u>OSHA Hazard:</u>	<u>Percentage:</u>
Mixture of Phosphonic acids	N	~ 55.5
Hydrochloric acid 7647-01-0	Y	~ 1.5
Phosphorous acid 10294-56-1	N	<1.2

## III – HAZARDS IDENTIFICATION

Warning Statements: DANGER! CAUSES EYE BURNS! CAUSES SKIN IRRITATION.

Primary Route(s) of Entry:

Ingestion: (X)  
Inhalation: ()  
Skin Contact: (X)  
Eye Contact: (X)

Primary Health Hazards:

Acute:

Eye: Will cause corrosive effects(burns or irreversible damage) to the eyes.  
Causes redness, burns, tissue destruction, permanent damage to the cornea

Skin: Severe irritant. Can cause redness, inflammation.

Inhalation: May cause significant respiratory tract irritation, coughing, a burning sensation, shortness of breath.

Ingestion: Low acute oral toxicity. Can cause nausea, vomiting.

Chronic effects: This product does not contain any ingredient designated by IARC, NTP, ACGIH or OSHA as probable or suspected human carcinogens.

Carcinogenicity Listings: None Known

OSHA: ()  
NTP: ()  
IARC: ()

#### **IV – FIRST AID MEASURES**

Emergency and First Aid Procedures:

Ingestion: Wash out mouth with water and keep at rest. Seek immediate medical attention.

Inhalation: Remove victim from immediate source of exposure and assure that the victim is breathing. If breathing is difficult, administer oxygen, if available. If victim is not breathing, administer CPR. Seek immediate medical attention.

Skin Contact: In case of contact, immediately wash with plenty of soap and water for at least 15 minutes. Seek medical attention. Remove contaminated clothing and shoes while washing. Clean contaminated clothing and shoes before re-use or discard if they cannot be thoroughly cleaned.

Eye Contact: Hold eyelids open and flush with a steady, gentle stream of water for at least fifteen minutes. Seek medical attention if irritation develops or persists or if visual changes occur.

Medical conditions possibly aggravated by exposure: No specific information found.

Note to physicians: All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred.

#### **V – FIRE FIGHTING MEASURES**

##### **FIRE AND EXPLOSION HAZARD DATA**

Flash Point : None

Flash point method: N/A

Flammable Limits:

LEL: N/A

UEL: N/A

Burning rate: N/A

Auto ignition temperature: N/A

Flammability classification:

Extinguishing Media: Dry chemical, foam, water fog, carbon dioxide.

Hazardous combustion products: Oxides of phosphorus, oxides of carbon.

Special Fire-fighting Procedures: Firefighters should wear NIOSH/MSA approved self-contained breathing apparatus and full protective clothing. Keep unnecessary

people away, isolate hazard area and deny entry. Stay upwind, keep out of low areas.

Fire-Fighting equipment:

Unusual Fire and Explosion Hazards: Product will burn under fire conditions.

NFPA Ratings:

- 3 Health Hazard Rating - Serious
- 0 Flammability Rating - Minimal
- 1 Instability Rating – Slight

## **VI – ACCIDENTAL RELEASE MEASURES**

Evacuation Procedures and Safety:

Ventilate closed spaces before entering. Personnel handling this material should be thoroughly trained to handle spills and releases. Wear appropriate protective gear for the situation. Evacuate and isolate spill area.

Containment of spill: Dike or retain dilution water or water from firefighting for later disposal. Collect and contain contaminated absorbent and dike material for disposal.

Cleanup & Disposal of Spill: Absorb neutralized spill with an inert absorbent. Shovel up into an appropriate closed container. **DO NOT RETURN MATERIAL TO ITS ORIGINAL CONTAINER.** Decontaminate tools and equipment following cleanup. Neutralize spill area with soda ash, sodium bicarbonate or lime.

Environmental and regulatory reporting: Do not flush to drain. Runoff from fire control or dilution water may cause pollution. Prevent material from entering public sewer system or any waterways. Spills may be reportable to the National Response Center (800-424-8802) and to state and/or local agencies.

## **VII – HANDLING AND STORAGE**

Precautions to Be Taken in Handling:

Do not get in skin or eyes. Avoid breathing vapor and mists. Personnel handling this product should be thoroughly trained as to its hazards.

**HAZARD WARNING:** This product belongs to a chemical family that has been tested in combination with Trimethylolpropane(TMP), TMP derived products or their corresponding TMP homologs for toxicity of the thermal decomposition products in the absence of flame. Products in this chemical family produced no significant adverse health effects in lab animals. However, there is a possibility that this thermal decomposition may produce bicyclic phosphates and/or phosphates in combination with certain other phosphorus compounds. Bicyclic phosphates and phosphates have acute neurotoxic properties and may cause convulsive seizures in lab test animals. Follow all precautionary measures outlined in this MSDS.

Storage:

Store in an area that is clean, cool, dry, well-ventilated. Store away from: bases, oxidizers.

Regulatory requirements: None established.

## **VIII – EXPOSURE CONTROLS / PERSONAL PROTECTION**

Remarks: These recommendations provide general guidance for handling this product.

Because specific work environments and material handling practices vary, safety procedures should be developed for each intended application. While developing safe handling procedures, do not overlook the need to clean equipment and piping systems for maintenance and repairs.

Respiratory Protection: When respirators are required, select NIOSH/MSHA approved equipment based on actual or potential airborne concentrations and in accordance with the appropriate regulatory standards and/or industrial recommendations.

Engineering controls:

Ventilation:

Local Exhaust:

Mechanical Exhaust:

Protective Clothing or Equipment: Eye and face protection requirements will vary dependent upon work environment conditions and material handling practices. Appropriate ANSI Z87 approved equipment should be selected for the particular use intended for this material. Eye contact should be prevented through use of chemical safety glasses with side shields or splash proof goggles. An emergency eye wash must be readily accessible to the work area. Face contact should be prevented through use of a face shield.

Skin contact must be prevented through the use of permeation resistant clothing, gloves and footwear, selected with regard for use conditions and exposure potential. An emergency shower must be readily accessible to the work area. Consideration must be given both to durability as well as permeation resistance.

Work/ Hygienic Practices: Do not store, use or consume foods, beverages, tobacco products or cosmetics in areas where this material is stored. Wash hands and face carefully before eating, drinking, using tobacco, applying cosmetics or using the toilet. Wash exposed skin promptly to remove accidental splashes or contact with this material.

## **IX - PHYSICAL/CHEMICAL CHARACTERISTICS**

Boiling Point: >100°C (212°F) at 760 mm Hg

Vapor Pressure (mm Hg): 17 mm Hg at 20°C/68°F

Vapor Density (Air=1): N/A

Solubility in Water: Soluble

Other solubilities: Not established

Appearance and odor: Clear light amber liquid with a faint odor.

Density: 1.42 g/ml at 20°C/68°F.

Specific gravity (20°C/68°F): 1.42

Melting Point: N/A – Liquid

Freezing Point: <30°F

Evaporation Rate : N/A

Percent volatile:0%

Refractive index: N/A

Surface tension: N/A

Viscosity(centistokes): 150 @ 20°C/68°F  
pH: N/A

## **X – STABILITY AND REACTIVITY**

Stability:       Unstable                       Stable

Stable under normal storage and handling conditions.

Conditions to Avoid: Heat, Temperatures above 200°C/392°F

Incompatibility: Strong bases, strong oxidizing agents.

Hazardous Decomposition or By-Products: Thermal oxidative decomposition of the product can produce oxides of carbon and phosphorus and acids of phosphorus.

Hazardous Polymerization:                       May Occur                       Will Not Occur

## **XI - TOXICOLOGICAL INFORMATION**

Acute:

Eye: Eye irritation, rabbit. Corrosive

Skin: Skin irritation, rabbit. May cause significant irritation to the skin

Acute inhalation effects: No test data found

Acute respiratory irritation: No test data found.

Acute oral effects:

Rat, oral, LD<sub>50</sub>:5,848 mg/kg

Acute dermal effects:

Rabbit, dermal, LD<sub>50</sub>:7,142 mg/kg

Chronic effects: This product does not contain any substances that are considered by OSHA, NTP, IARC or ACGIH to be “probable” or “suspected” human carcinogens.

Carcinogenicity: None

Mutagenicity: Not established

Teratogenicity: Not established

## **XII – ECOLOGICAL INFORMATION**

Ecotoxicity: This product may cause adverse environmental impact if as-received material reaches waterways .

Acute Ecotoxicity:

96 hours, LC<sub>50</sub>(rainbow trout): >360mg/l

48 hours, EC<sub>50</sub>(daphnia):5,270 mg/l

72 hours, IC<sub>50</sub>(Algae:100 mg/l

Environmental fate: N/A

Environmental transport: Water

Environmental degradation: N/A

Absorption/Mobility:

Air: N/A

Water: Considerable solubility and mobility  
Soil percolation: N/A

### **ENVIRONMENTAL HAZARDS (PR Notice 93-10)**

This product is toxic to fish and aquatic organisms. Do not contaminate water by cleaning of equipment or disposal of wastes. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance, contact your State Water board or Regional Office of the EPA.

### **XIII – DISPOSAL CONSIDERATIONS**

Chemical additions, processing or otherwise altering this material may make the waste management information presented in this MSDS incomplete, inaccurate or otherwise inappropriate. Please be advised that state and local requirements for waste disposal may be more restrictive or otherwise different from federal laws and regulations. Consult state and local regulations regarding the proper disposal of this material.

EPA Hazardous Waste: Yes

### **XIV - TRANSPORTATION DATA**

U.S. Department of Transportation - 49 CFR

Proper Shipping Name: Corrosive liquid, acidic, organic, N.O.S

Technical Shipping Name: Phosphonic and hydrochloric acid

Hazard Class/Division Number: 8

ID Number: UN 3265

Packing Group: II

Label Required: CORROSIVE

Emergency Guide #: 153

Placard Required:

Marine Pollutant:

International Maritime Organization - IMDG

Proper Shipping Name: Same as above

Hazard Class/Division Number:

ID Number:

Packing Group:

Label Required:

Placard Required:  
Marine Pollutant:

## **XV - REGULATORY INFORMATION**

### Inventory Status

Inventory	Status
United States(TSCA)	Y
Canada(DSL)	Y
Europe(EINECS/ELINCS)	Y
Australia(AICS)	Y
Japan(MITI)	N
South Korea(KECL)	Y

Y = All ingredients are on the inventory

N = Not determined or one or more ingredients are not on the inventory and are not exempt from listing.

SARA Title III Hazard Classes: Fire Hazard: NO Reactive Hazard: NO Release of Pressure: NO Acute Health hazard: YES Chronic Health hazard: NO

SARA 313 Chemicals: Hydrochloric Acid (~ 1.5%)

SARA EHS (Extremely hazardous substance)/CERCLA Hazardous Substances

Ingredient:	CERCLA/SARA RQ	SARA EHS TPQ
Hydrochloric Acid	5000 lbs	500 lbs

OSHA regulations:

Air contaminant (29 CFR 1910.1000, Table Z-1, Z-1-A): Not listed

OSHA specifically regulated substance (29CFR 1910): Not listed

State regulations: Product does not contain any components that are regulated under California Proposition 65.

## **XVI - ADDITIONAL INFORMATION**

This MSDS replaces the 10/19/2001 version. Any changes in information are as follows:  
In Section I - 24 hr emergency telephone number

**ALWAYS COMPLY WITH ALL APPLICABLE INTERNATIONAL, FEDERAL, STATE AND LOCAL REGULATIONS REGARDING THE TRANSPORTATION, STORAGE, USE AND DISPOSAL OF THIS CHEMICAL.**

Due to the changing nature of regulatory requirements, the REGULATORY INFORMATION listed in Section XV of this document should NOT be considered all-inclusive or authoritative. International, Federal, State and Local regulations should be consulted to determine compliance with all required reporting requirements.

The information in this MSDS was obtained from sources, which we believe are reliable. **HOWEVER, THE INFORMATION IS PROVIDED WITHOUT ANY WARRANTY, EXPRESS OR IMPLIED, REGARDING ITS CORRECTNESS.** The conditions or

methods of handling, storage, use, and disposal of the product are beyond our control and may be beyond our knowledge. **FOR THIS AND OTHER REASONS, WE DO NOT ASSUME RESPONSIBILITY AND EXPRESSLY DISCLAIM LIABILITY FOR LOSS, DAMAGE OR EXPENSE ARISING OUT OF OR IN ANY WAY CONNECTED WITH THE HANDLING, STORAGE, USE OR DISPOSAL OF THE PRODUCT.** This MSDS was prepared and is to be used only for this product. If the product is used as a component in another product, this MSDS information may not be applicable.

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