SAFETY DATA SHEET

1. PRODUCT IDENTIFICATION

Product Name: SPA CALCIUM HARDNESS INCREASER
Synonym(s): Calcium Hardness Increaser
Recommended Uses: For Swimming Pools and Spas
SDS Reference: 18

Company Information: ALLCHEM PERFORMANCE PRODUCTS, INC.
6010 NW FIRST PLACE
GAINESVILLE, FL 32607
Tel: 352-378-9696

Distributed By: HACHIK DISTRIBUTORS, INC
100 COMMERCE DRIVE
ASTON PA 19015

24 HOUR EMERGENCY NUMBER: INFOTRAC (TRANSPORTATION): 1-800-535-5053

2. HAZARD(S) IDENTIFICATION

Classification: HARMFUL IF SWALLOWED
EYE IRRITANT
SKIN IRRITANT

Signal Word: WARNING

Hazard Statements: HEALTH HAZARDS:
Acute Toxicity - Oral - Harmful if swallowed - Category 4
Acute Toxicity - Dermal - Not classified as acutely toxic for dermal exposure
Hazard Eye - Causes eye irritation - Category 2B
Hazard Skin - Causes skin irritation - Category 2
Unknown Acute Dermal Toxicity: 3% of this product consists of ingredient(s) of unknown acute dermal toxicity.
PHYSICAL HAZARDS:
Heat is generated when mixed with water or aqueous acid solutions.

Precautionary Statements: Wear eye and face protection and wash hands and clothing after handling. Do not eat, drink or smoke when using this product. Wash thoroughly after handling.

Eye Contact: Causes eye irritation. Wear eye and face protection. Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, get medical attention.

Skin Contact: Causes skin irritation. Wear protective gloves. Wash with plenty of water. Take off contaminated clothing and was it before reuse. If skin irritation occurs, get medical attention.

Inhalation: Dust may cause irritation to upper respiratory tract (nose and throat).

Ingestion: Consumption of solids or hypertonic solutions causes nausea, vomiting and increased thirst.

3. COMPOSITION

Chemical Name:	PERCENT %	CAS #
Calcium Chloride	>94 - <97%	10043-52-4
Potassium Chloride	>2 - <3%	7447-40-7
Sodium Chloride	>1 - <2%	7647-14-5
Water	< 1%	7732-18-5

4. FIRST AID

If In Eyes: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice if irritation occurs.

If on Skin or Clothing: If on skin wash with plenty of water. If skin irritation occurs, get medical attention. Take off contaminated clothing and wash before reuse.

If Inhaled: If inhalation of dust occurs and adverse effects result, remove to uncontaminated area. Call a Poison Control Center or doctor if you feel unwell.

If Swallowed: If swallowed, do not induce vomiting. Give one cup (8 ounces or 240 ml) of water or milk if available and transport to a medical facility. Never give anything by mouth to an unconscious or convulsive person.

Note: Have the product container or label with you when calling a poison control center or doctor, or going for treatment. Due to irritant properties, resulting from heat created as solid materials dissolved in water,

swallowing may result in burns/ulcerations of mucus membranes. If burn is present, treat as any thermal burn. No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of patient.

5. FIREFIGHTING MEASURES

Suitable / Unsuitable Extinguishing Media:	Use extinguishing agents appropriate for surrounding fire.
Specific Hazards from Chemical:	This material does not burn.
Special Protective Equipment:	Keep unnecessary people away, isolate hazard area and deny entry. This material does not burn. Fight fire for other material that is burning. Water should be applied in large quantities as fine spray. Wear NIOSH approved positive-pressure self-contained breathing apparatus operated in pressure demand mode. Wear protective fire fighting clothing (includes fire fighting helmet, coat, trousers, boots, and gloves). Avoid contact with this material during fire fighting operations. If contact is likely, change to full chemical resistant fire fighting clothing with self-contained breathing apparatus. If this is not available, wear full chemical resistant clothing with self-contained breathing apparatus and fight fire from a remote location. For protective equipment in post-fire or non-fire clean-up situations, refer to the relevant sections.
Other Information:	No data available

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions:	Spilled material may cause a slipping hazard. Isolate area. Keep unnecessary and unprotected personnel from entering the area. Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls and Personal Protection. Refer to Section 7, Handling, for additional precautionary measures.
Methods and Materials for cleanup:	Small and large spills: Contain spilled material if possible. Collect in suitable and properly labeled containers. Flush residue with plenty of water. See Section 13, Disposal Considerations, for additional information. Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See Section 12, Ecological Information.

7. HANDLING AND STORAGE

Handling:	Heat developed during diluting or dissolving is very high. Use cool water when diluting or dissolving (temperature less than 80°F, 27°C). Avoid contact with eyes, skin, and clothing. Do not swallow. Wash thoroughly after handling. Keep container tightly closed. See Section 8, EXPOSURE CONTROLS AND PERSONAL PROTECTION.
Storage:	Store in a dry place in original container. Protect from atmospheric moisture.

8. EXPOSURE CONTROLS / PERSONAL PROTECTIONS

OSHA permissible exposure limit:	Particulates not otherwise regulated (PNOR): OSHA: PEL TWA: 15 mg/m3 (total) OSHA: PEL TWA: 5 mg/m3 (respirable) Particulates not otherwise specified (PNOS): ACGIH TWA: 10 mg/m3 (inhalable) ACGIH TWA: 3 mg/m3 (respirable) Additional Advice: Ingestion: Use good personal hygiene. Do not consume or store food in the work area. Wash hands before smoking or eating.
Appropriate Engineering Controls:	Use local exhaust ventilation, or other engineering controls to maintain airborne levels below exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, general ventilation should be sufficient for most operations. Local exhaust ventilation may be necessary for some operations.
Individual Protection Measures:	Eye Protection: Wear safety glasses with side-shields. For dusty operations or when handling solutions of the material, wear chemical goggles. Skin and Body Protection: Wear clean, body-covering clothing. Hand Protection: Use gloves chemically resistant to this material. If hands are cut or scratched, use gloves chemically resistant to this material even for brief exposures. Examples of preferred glove barrier materials include: neoprene, polyvinyl chloride ("PVC" or "vinyl"), nitrile/butadiene rubber ("nitrile" or "NBR"). NOTICE: The selection of a specific glove for a particular application and duration of use in a workplace should also take into account all relevant workplace factors such as, but not limited to: Other chemicals

which may be handled, physical requirements (cut/puncture protection, dexterity, thermal protection), potential body reactions to glove materials, as well as the instructions/specifications provided by the glove supplier.
Respiratory Protection: Respiratory protection should be worn when there is a potential to exceed the exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, wear respiratory protection when adverse effects, such as respiratory irritation or discomfort have been experienced, or where indicated by your risk assessment process. In dusty or misty atmospheres, use an approved particulate respirator. The following should be effective types of air-purifying respirators: High efficiency particulate air (HEPA) N95. A respiratory protection program that meets applicable regulatory requirements must be followed whenever workplace conditions warrant use of a respirator.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	White Pellets	Flammability (solid/gas):	The product itself does not burn.
Odor:	Odorless	Upper/lower Flammability or Exposure limits:	No data available
Odor Threshold:	No Applicable	Vapor Pressure:	Negligible at ambient temperature
pH:	Not Applicable	Vapor Density:	Not Applicable
Melting Point/Freezing Point:	1422° F (772° C)	Density:	52- 58 lb/ft3
		Solubility(ies):	Readily soluble
Initial Boiling Point/Boiling Range:	Not Applicable	Partition Coefficient: n-octanol/water:	Not Applicable
		Auto-ignition Temperature:	Not Applicable.
Flash Point:	Not Applicable	Decomposition Temperature:	No data available
Evaporation Rate:	Not Applicable	Viscosity:	No data available

10. STABILITY AND REACTIVITY

Stability/Reactivity: Stable. Hygroscopic.

Possibilities of Hazardous Reactions: Hazardous Polymerization: Will Not Occur.

Conditions to Avoid: None known. Avoid moisture.

Incompatible Materials: Heat is generated when mixed with water. Spattering and boiling can occur. Avoid contact with: bromide trifluoride, 2-furan percarboxylic acid because calcium chloride is incompatible with those substances. Contact with zinc forms flammable hydrogen gas, which can be explosive. Catalyzes exothermic polymerization of methyl vinyl ether. Attacks metals in the presence of moisture, and may release flammable hydrogen gas. Reaction of bromide impurity with oxidizing materials may generate trace levels of impurities such as bromates.

Hazardous Decomposition Materials: Does not decompose.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity:
Oral LD50 (Rat): 1021 mg/kg
Dermal LD50 (Rabbit): > 2687 mg/kg
Inhalation LC50: No data available.

COMPONENT TOXICITY: (Component data may differ from actual product toxicity given)
Calcium Chloride:
Oral LD50: 1000 mg/kg
Dermal LD50: 2630 mg/kg

Potassium Chloride:
Oral LD50: 2600 mg/kg

Sodium Chloride:
Oral LD50: 3 g/kg
Dermal LD50: 10 g/kg
Inhalation LC50: 42 g/m3 (1 hr-Rat)

Chronic Toxicity: For the minor component(s): POTASSIUM CHLORIDE: In animals, effects have been reported on the following organs after ingestion: Gastrointestinal tract, heart, and kidney. Dose levels producing these

	effects were many times higher than any dose levels expected from exposure due to use. SODIUM CHLORIDE: Medical experience with sodium chloride has shown a strong association between elevated blood pressure and prolonged dietary overuse. Related effects could occur in the kidneys.
Reproductive Toxicity:	Not classified as a developmental or reproductive toxin per GHS criteria. For the major component(s): Did not cause birth defects or any other fetal effects in laboratory animals
Carcinogenicity:	This product is not classified as a carcinogen by NTP, IARC or OSHA.
Mutagenicity:	Not classified as a mutagen per GHS criteria. The data presented are for the following material: Calcium chloride (CaCl2) - In vitro genetic toxicity studies were negative. The data presented are for the following material: Potassium chloride - In vitro genetic toxicity studies were positive. However, the relevance of this to humans is unknown. For the minor component(s): Sodium chloride - In vitro genetic toxicity studies were predominantly negative.

12. ECOLOGICAL INFORMATION

Aquatic Toxicity:	Material is practically non-toxic to aquatic organisms on an acute basis. (LC50/EC50/EL50/LL50 >100 mg/L in the most sensitive species tested). Freshwater Fish Toxicity: Calcium Chloride: LC50, bluegill (Lepomis macrochirus): 8350 - 10650 mg/l Potassium Chloride: LC50, rainbow trout (Oncorhynchus mykiss), 96 h: 4236 mg/l Sodium Chloride: LC50, fathead minnow (Pimephales promelas): 10610 mg/l Invertebrate Toxicity: Calcium Chloride: LC50, water flea Daphnia magna: 759 - 3005 mg/l Potassium Chloride: EC50, water flea Daphnia magna, 24 h, immobilization: 590 mg/l LC50, water flea Ceriodaphnia dubia, 96 h: 3470 mg/l Sodium Chloride: LC50, water flea Daphnia magna: 4571 mg/l
Avian Toxicity:	No data available
Environmental Hazards:	BIODEGRADATION: This material is inorganic and not subject to biodegradation. BIOCONCENTRATION: No bioconcentration is expected because of the relatively high water solubility. Potential for mobility in soil is very high (Koc between 0 and 50). Partitioning from water to n-octanol is not applicable. MOBILITY IN SOIL: Calcium chloride is not expected to be absorbed in soil due to its dissociation properties and high water solubility. It is expected to dissociate into calcium and chloride free ions or it may form stable inorganic or organic salts with other counter ions, leading to different fates between calcium and chloride ions in soil and water components. Calcium ions may bind to soil particulate or may form stable inorganic salts with sulfate and carbonate ions. The chloride ion is mobile in soil and eventually drains into surface water because it is readily dissolved in water.

13. DISPOSAL CONSIDERATIONS

Disposal:	Reuse or reprocess, if possible. All disposal practices must be in compliance with all Federal, State/Provincial and local laws and regulations. Regulations may vary in different locations. Report spills if applicable. Waste characterizations and compliance with applicable laws are the responsibility solely of the waste generator. AS YOUR SUPPLIER, WE HAVE NO CONTROL OVER THE MANAGEMENT PRACTICES OR MANUFACTURING PROCESSES OF PARTIES HANDLING OR USING THIS MATERIAL. THE INFORMATION PRESENTED HERE PERTAINS ONLY TO THE PRODUCT AS SHIPPED IN ITS INTENDED CONDITION AS DESCRIBED IN SDS SECTION: Composition Information. FOR UNUSED & UNCONTAMINATED PRODUCT, the preferred options include sending to a licensed, permitted: Landfill and waste water treatment system.

14. TRANSPORATION INFORMATION

Transportation:	Please refer to applicable regulations or call company noted under Section I.

15. REGULATORY INFORMATION

TSCA:	USA: Reported in the EPA TSCA Inventory.
SARA (311, 312):	Acute Health Hazard
SARA 313:	None of the ingredients are listed.
Right To Know Hazardous Substance List:	California Prop 65: This product is not listed, but it may contain impurities/trace elements known to the State of California to cause cancer or reproductive toxicity as listed under Proposition 65 State Drinking Water and Toxic Enforcement Act. WARNING: This product (when used in aqueous formulations with a chemical oxidizer such as ozone) may react to form calcium bromate, a chemical known to the State of

California to cause cancer.

Waste Classification:	No data available
Workplace Classification:	This product is considered hazardous under the OSHA Hazard Communication Standard (29CFR 1910.1200).
CERCLA Reportable Quantity:	No data available

16. OTHER INFORMATION

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 15 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 SDS 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 SDS was prepared and is to be used only for this product. If the product is used as a component in another product, this SDS information may not be applicable.

HMIS Rating:	Health: 2 Flammability: 0 Reactivity: 0	NFPA Rating:	Health: 1 Flammability: 0 Reactivity: 0
Revision Date:	3/17/2015	Special Hazard Warning:	Not applicable.