



# SAFETY DATA SHEET

## 1. PRODUCT IDENTIFICATION

Product Name: E-Z SHOCK  
 Synonym(s): None  
 Recommended Uses: Swimming Pool Sanitizer  
 SDS Reference: 19

Company Information: ALLCHEM PERFORMANCE PRODUCTS, INC. Distributed By: HACHIK DISTRIBUTORS, INC  
 6010 NW FIRST PLACE 100 COMMERCE DRIVE  
 GAINESVILLE, FL 32607 ASTON PA 19015  
 Tel: 352-378-9696

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

## 2. HAZARD(S) IDENTIFICATION

Classification: OXIDIZER  
 CORROSIVE  
 INHALATION HAZARD  
 TARGET ORGAN TOXICITY (SINGLE)  
 ENVIRONMENTAL HAZARD



Signal Word: DANGER

Hazard Statements: HEALTH HAZARDS:  
 Skin Corrosion - Causes severe skin burns and eye damage - Category 1B - H314  
 Eye Damage - Causes serious eye damage - Category 1 - H318  
 Inhalation Hazard - Toxic if inhaled - Category 3 - H331  
 Specific Target Organ Toxicity - Single Dose - May cause respiratory irritation - Category 3 - H335  
 Acute Oral Toxicity - Harmful if swallowed - Category 4 - H302  
 PHYSICAL HAZARDS:  
 Oxidizing Solid - Oxidizer - May intensify fire - Class 2 - H272  
 ENVIRONMENTAL HAZARDS:  
 Very toxic to aquatic life - Category 1 - H400

Precautionary Statements: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
 Keep/Store away from clothing/ combustible materials. Take any precaution to avoid mixing with combustibles. Do not breathe vapors. Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Wear protective gloves/ protective clothing/ eye protection/ face protection. Store in a well-ventilated place. Keep container tightly closed. Store locked up. Dispose of contents/container in accordance with local regulation.

Eye Contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/ physician.

Skin Contact: Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower. Wash contaminated clothing before reuse.

Inhalation: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/ physician.

Ingestion: Rinse mouth. Do NOT induce vomiting. Call a POISON CENTER or doctor/ physician if you feel unwell.

## 3. COMPOSITION

Chemical Name:	PERCENT %	CAS #
Calcium Hypochlorite	40 - 55	7778-54-3
Sodium Chloride	5 - 15	7647-14-5
Calcium Chlorate	0 - 4	10137-74-3
Calcium Chloride	0 - 4	10043-52-4
Calcium Hydroxide	0 - 5	1305-62-0
Calcium Carbonate	0 - 4	471-34-1
Magnesium Sulfate Heptahydrate	25 - 35	10034-99-8
Water	17 - 22	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



# SAFETY DATA SHEET

	advice.
If on Skin or Clothing:	Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.
If Inhaled:	Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or doctor for further treatment advice.
If Swallowed:	Call a poison control center or doctor immediately for treatment. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.
Note:	Probable mucosal damage may contraindicate the use of gastric lavage. Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

## **5. FIREFIGHTING MEASURES**

Suitable / Unsuitable Extinguishing Media:	Water only. Do not use dry extinguishers containing ammonium compounds. Use water to cool containers exposed to fire.
Specific Hazards from Chemical:	This product is chemically reactive with many substances. Any contamination of the product with other substances by spill or otherwise may result in a chemical reaction and fire. This product is an NFPA Class 1 Oxidizer which can cause a severe increase in fire intensity. Product is not known to be flammable, combustible or pyrophoric.
Special Protective Equipment:	See Section 8 for protective equipment for fire fighting.
Other Information:	This product is a strong oxidizer which is capable of intensifying a fire once started. Product is not known to be flammable, combustible or pyrophoric.

## **6. ACCIDENTAL RELEASE MEASURES**

Personal Precautions:	Response to a large quantity spill (100 pounds or greater) or when dusting or decomposition gas exposure could occur requires the use of a positive pressure full face supplied air respirator or self contained breathing apparatus (SCBA), chemical resistant gloves, coveralls and boots. In case of fire, this personal protective equipment should be used in addition to normal fire fighter equipment.
Methods and Materials for cleanup:	<p>Air Release: Vapors may be suppressed by the use of water fog. All water utilized to assist in fume suppression, decontamination or fire suppression may be contaminated and must be contained before disposal and/or treatment.</p> <p>Water Release: This product is heavier than water. This material is soluble in water. Monitor all exit water for available chlorine and pH. Advise local authorities of any contaminated water release.</p> <p>Land Release: DANGER: All spills of this product should be treated as contaminated. Contaminated product may initiate a chemical reaction that may spontaneously ignite any combustible material present, resulting in a fire of great intensity. In case of a spill, separate all spilled product from packaging, debris and other material. Using a clean broom or shovel, place all spilled product into plastic bags, and place those bags into a clean, dry disposal container, properly marked and labeled. Disposal containers made of plastic or metal are recommended. Do not seal disposal containers tightly. Immediately remove all product in disposal containers to an isolated area outdoors. Place all damaged packaging material in a disposal container of water to ensure decontamination (i.e. removal of all product) before disposal. Place all undamaged packaging in a clean, dry container properly marked and labeled.</p> <p>Additional Spill Information : Hazardous concentrations in air may be found in local spill area and immediately downwind. Remove all sources of ignition. Stop source of spill as soon as possible and notify appropriate personnel. Dispose of spill residues per guidelines under Section 13, Disposal Consideration. REPORTABLE QUANTITY: 10 lbs. (as calcium hypochlorite) per 40 CFR 302.4.</p>

## **7. HANDLING AND STORAGE**

Handling:	Avoid inhalation of dust and fumes. Do not take internally. Avoid contact with skin, eyes and clothing. Upon contact with skin or eyes, wash off with water. Remove contaminated clothing and wash before reuse.
Storage:	<p>Keep product tightly sealed in original containers. Store product in a cool, dry, well-ventilated area. Store away from combustible or flammable products. Keep product packaging clean and free of all contamination, including, e.g. other pool treatment products, acids, organic materials, nitrogen-containing compounds, dry powder fire extinguishers (containing mono-ammonium phosphate), oxidizers, all corrosive liquids, flammable or combustible materials, etc.</p> <p>Shelf Life Limitations: Do not store product where the average daily temperature exceeds 95° F. Storage above this temperature may result in rapid decomposition, evolution of chlorine gas and heat sufficient to ignite combustible products. Shelf life (that is, the period of time before the product goes below stated label strength) is determined by storage time and temperatures. Store in a cool, dry and well ventilated</p>



# SAFETY DATA SHEET

area. Prolonged storage at elevated temperatures will significantly shorten the shelf life. Storage in a climate controlled storage area or building is recommended in those areas where extreme high temperatures occur.

Incompatible Materials for Storage: Do not allow product to come in contact with other materials, including e.g. other pool treatment products, acids, organic materials, nitrogen-containing compounds, dry powder fire extinguishers (containing mono-ammonium phosphate), oxidizers, all corrosive liquids, flammable or combustible materials, etc. A chemical reaction with such substances can cause a fire of great intensity. Do not store at temperatures above an average daily temperature of 35° C / 95° F. Storage above this temperature may result in rapid decomposition, evolution of chlorine gas and heat sufficient to ignite combustible products.  
(NFPA Oxidizer Class 1)

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTIONS

OSHA permissible exposure limit: CALCIUM HYPOCHLORITE CAS NR.7778-54-3  
ARCH-OEL\*: 1 mg/m3 TWA  
NIOSH-IDLH: 37 - 48 mg/m3 Conc based on IDLH concentration of chlorine

CALCIUM HYDROXIDE CAS NR. 1305-62-0  
ACGIH: 5 mg/m3 TWA

\*ARCH-OEL - Arch recommended Occupational Exposure Guideline

Appropriate Engineering Controls: Ventilation: Local exhaust ventilation or other engineering controls are normally required when handling or using this product to keep airborne exposures below the TLV, PEL or other recommended exposure limit.

Individual Protection Measures: Respiratory Protection : Wear a NIOSH approved respirator if levels above the exposure limits are possible.  
Respirator Type : A NIOSH approved full-face air purifying respirator equipped with combination chlorine/P100 cartridges. Air purifying respirators should not be used in oxygen deficient or IDLH atmospheres or if exposure concentrations exceed ten (10) times the published limit.  
Skin Protection : Wear impervious gloves to avoid skin contact. A full impervious suit is recommended if exposure is possible to a large portion of the body. A safety shower should be provided in the immediate work area.  
Eye Protection: Use chemical goggles. Emergency eyewash should be provided in the immediate work area.  
Protective Clothing Type: Neoprene, Nitrile, Natural rubber (This includes: gloves, boots, apron, protective suit)

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Free flowing white granules	Flammability (solid/gas):	Not Applicable
Odor:	Chlorine-like	Upper/lower Flammability or Exposure limits:	Not Applicable
Odor Threshold:	No data available	Vapor Pressure:	Not Applicable
pH:	10 - 10.8 @ 25°C (in 1% distilled water)	Vapor Density:	Not Applicable
Melting Point/Freezing Point:	Not Applicable	Density:	0.8g/cc
		Solubility(ies):	18% @ 25°C in water
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:	338 - 356°F (170 - 180°C)
Evaporation Rate:	Not Applicable	Viscosity:	Not Applicable

## 10. STABILITY AND REACTIVITY

Stability/Reactivity: Product is not sensitive to mechanical shock or impact. Product is not sensitive to electrical static discharge. Product will not undergo hazardous polymerization. Product is an NFPA Class 1 oxidizer which can cause a severe increase in fire intensity. Not pyrophoric. Not an organic peroxide. If subjected to excessive temperatures, the product may undergo rapid decomposition, evolution of chlorine gas, and heat sufficient to ignite combustible substances. If product is exposed to small amounts of water, it can react violently to produce heat and toxic gases and spatter. Use copious amounts of water for fires involving this product.

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

Conditions to Avoid: Do not store next to heat source, in direct sunlight, or elevated storage temperature. Do not store where



# SAFETY DATA SHEET

the daily average temperature exceeds 95°F. Prevent ingress of humidity and moisture into container or package. Always close the lid.

**Incompatible Materials:** This product is chemically reactive with many substances, including, e.g., other pool treatment products, acids, organics, nitrogen-containing compounds, dry powder fire extinguishers (containing mono-ammonium phosphate), oxidizers, corrosive, flammable or combustible materials. Do not allow product to contact any foreign matter, including other water treatment products. Contamination or improper use may cause a fire of great intensity, explosion or the release of toxic gases. If product is exposed to small amounts of water, it can react violently to produce heat and toxic gases and spatter.

**Hazardous Decomposition Materials:** Chlorine.

## **11. TOXICOLOGICAL INFORMATION**

**Acute Toxicity:** COMPONENT ANIMAL TOXICITY:  
Oral LD50 value:  
65% CALCIUM HYPOCHLORITE LD50 = 850 mg/kg Rat  
SODIUM CHLORIDE LD50 = 3,000 mg/kg Rat  
CALCIUM CHLORIDE LD50 = 1,000 mg/kg Rat  
CALCIUM HYDROXIDE LD50 = 7,340 mg/kg Rat

Dermal LD50 value:  
65% CALCIUM HYPOCHLORITE LD50 > 2,000 mg/kg Rabbit  
SODIUM CHLORIDE LD50 > 10,000 mg/kg Rabbit  
CALCIUM CHLORIDE LD50 = 2,630 mg/kg Rat  
CALCIUM HYDROXIDE No data

Inhalation LC50 value:  
65% CALCIUM HYPOCHLORITE Inhalation LC50 1 h, (Nose Only) = 2.04 mg/l Rat  
65% CALCIUM HYPOCHLORITE Inhalation LC50 4 h, (Nose Only) = 0.51 mg/l Rat  
SODIUM CHLORIDE Inhalation LC50 1 h > 42 mg/l Rat  
CALCIUM CHLORIDE No data  
CALCIUM HYDROXIDE No data

PRODUCT ANIMAL TOXICITY:  
Oral LD50 value: LD50 Approximately 800 mg/kg Rat  
Dermal LD50 value: LD50 > 2,000 mg/kg Rabbit  
Inhalation LC50 1.00 h (Nose Only) > 2.04 mg/l Rat  
Inhalation LC50 4 h (Nose Only) > 0.51 mg/l Rat

Skin Irritation: Dry material causes moderate skin irritation. Wet material causes skin burns.  
Eye Irritation: Corrosive to eyes.  
Skin Sensitization: This material is not known or reported to be a skin or respiratory sensitizer.

ACUTE TOXICITY: This product is corrosive to all tissues contacted and upon inhalation, may cause irritation to mucous membranes and respiratory tract. The dry material is irritating to the skin. However when wet, it will produce burns to the skin.

**Chronic Toxicity:** There are no known or reported effects from repeated exposure except those secondary to burns.

**Reproductive Toxicity:** Calcium hypochlorite has been tested for teratogenicity in laboratory animals. Results of this study have shown that calcium hypochlorite is not a teratogen.  
CALCIUM CHLORIDE is not known or reported to cause reproductive or developmental toxicity.

**Carcinogenicity:** This product is not known or reported to be carcinogenic by any reference source including IARC, OSHA, NTP or EPA. One hundred mice were exposed dermally 3 times a week for 18 months to a solution of calcium hypochlorite. Histopathological examination failed to show an increased incidence of tumors. IARC (International Agency for Research on Cancer) reviewed studies conducted with several hypochlorite salts. IARC has classified hypochlorite salts as having inadequate evidence for carcinogenicity to humans and animals. IARC therefore considers hypochlorite salts to be not classifiable as to their carcinogenicity to humans (Group 3 Substance).  
CALCIUM CHLORIDE is not known or reported to be carcinogenic by any reference source including IARC, OSHA, NTP, or EPA.

**Mutagenicity:** Calcium hypochlorite has been tested in the Dominant lethal assay in male mice, and it did not induce a



# SAFETY DATA SHEET

dominant lethal response. Calcium hypochlorite has been reported to produce mutagenic activity in two in vitro assays. It has, however, been shown to lack the capability to produce mutations in animals based on results from the micronucleus assay. In vitro assays frequently are inappropriate to judge the mutagenic potential of bactericidal chemicals due to a high degree of cellular toxicity. The concentration which produces mutations in these in vitro assays is significantly greater than the concentrations used for disinfection. Based on high cellular toxicity in in vitro assays and the lack of mutagenicity in animals, the risk of genetic damage to humans is judged not significant. CALCIUM CHLORIDE was determined to be non-mutagenic in the Ames assay. It was also shown to be non-clastogenic in the chromosomal aberration test.

## 12. ECOLOGICAL INFORMATION

### Aquatic Toxicity:

#### PRODUCT TOXICITY:

Bluegill - (nominal, static). 96 h LC50 0.12 mg/l  
Rainbow trout (*Salmo gairdneri*), - (nominal, static). 96 h LC50 0.22 mg/l  
Daphnia magna, - (nominal, static). 48 h LC50 0.15 mg/l

#### CALCIUM HYPOCHLORITE

Bluegill - (nominal, static). 96 h LC50 0.88 mg/l  
Rainbow trout (*Salmo gairdneri*), - (nominal, static). 96 h LC50 0.16 mg/l  
Daphnia magna, - (nominal, static). 48 h LC50 0.11 mg/l

#### 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

### Avian Toxicity:

#### PRODUCT TOXICITY:

Bobwhite quail - Dietary LC50 > 7,000 ppm  
Mallard ducklings - Dietary LC50 > 7,000 ppm  
Bobwhite quail - Oral LD50 4,800 mg/kg

#### CALCIUM HYPOCHLORITE

Bobwhite quail - Dietary LC50 > 5,000 ppm  
Mallard ducklings - Dietary LC50 > 5,000 ppm  
Bobwhite quail - Oral LD50 3,474 mg/kg

### Environmental Hazards:

This product is highly toxic to fish and other aquatic organisms. Do not discharge effluent containing this product into lakes, ponds, streams, estuaries, oceans or public 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.

## 13. DISPOSAL CONSIDERATIONS

### Disposal:

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. 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. Disposal Methods : As a non-hazardous waste, it should be disposed of in accordance with local, state and federal regulations.

## 14. TRANSPORTATION 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):

Health: Immediate (Acute) Health Hazard



# SAFETY DATA SHEET

Physical: None

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

Right To Know California - This product is not listed on California Prop 65.  
 Hazardous Substance List: Massachusetts - Calcium Chlorate, Calcium Hydroxide, Calcium Hypochlorite, Calcium Carbonate.  
 New Jersey - Calcium Chloride, Calcium Chlorate, Calcium Dihydroxide, Calcium Hypochlorite, Calcium Carbonate, Sodium Chloride, Magnesium Sulphate Heptahydrate.  
 Pennsylvania - Calcium Chloride, Calcium Chlorate, Calcium Dihydroxide, Calcium Hypochlorite, Calcium Carbonate, Sodium Chloride, Magnesium Sulphate Heptahydrate.

Waste Classification: 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.  
 Disposal Methods : As a non-hazardous waste, it should be disposed of in accordance with local, state and federal regulations.

Workplace Classification: This product is considered hazardous under the OSHA Hazard Communication Standard (29CFR 1910.1200).

CERCLA Reportable Quantity: CALCIUM HYPOCHLORITE : 10 lbs.  
 Not listed under TSCA 12(b) or TSCA-Section 5.

### EPA NOTES:

This chemical is a pesticide product registered by the United States Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. The pesticide label also includes other important information, including directions for use. Following is the hazard information as required on the pesticide label:

SIGNAL WORD: DANGER

PRECAUTIONARY STATEMENTS. HAZARDS TO HUMANS AND DOMESTIC ANIMALS. DANGER. Corrosive. Causes irreversible eye damage or skin burns. Harmful if swallowed, or absorbed through skin. Open in a well ventilated area. Avoid breathing dust and fumes. Do not get in eyes, on skin or on clothing. Wear goggles and rubber gloves. For additional protection of skin, wear long sleeves and long pants. Wash hands after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove contaminated clothing and wash clothing before reuse.

PHYSICAL and CHEMICAL HAZARDS: DANGER. If product is exposed to small amounts of water, it can react violently to produce heat and toxic gas and spatter. Do not add water to this product. Add only into water. Do not mix this product with a small amount of water. Only add this product directly to your pool. Do not allow to become wet or damp before use. Can react with other materials, including other water treatment products, to cause fire, explosion, and the release of toxic gases. Keep all foreign matter, including other water treatment products, away from this product. Use only clean dry utensils to dispense this product.

Do not allow this product to contact other water treatment products. If used with a skimmer, make sure skimmer is completely clean and free of residue from other water treatment products before putting this product in a skimmer. Avoid spilling this product. Exposure to heat can cause this product to rapidly decompose, leading to fire, explosion, and the release of toxic gases. Store in a cool, dry, well ventilated area away from heat or open flame. Strong oxidizing agent. This product can increase fire intensity. Keep away from heat and from flame and burning material (like a lighted cigarette).

ENVIRONMENTAL HAZARD: This pesticide is toxic to fish and aquatic organisms.

### 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: No data available

NFPA Rating: Health: 3  
 Flammability: 0  
 Reactivity: 1

Revision Date: 5/27/2015

Special Hazard Warning: OX - Oxidizer, Class 1