



SAFETY DATA SHEET
Super Shock - 0020

Product Name: Super Shock
Date: 5/19/2015

SECTION 1 **IDENTIFICATION**

Supplier: Phoenix Products Company
55 Container Drive
Terryville, CT 06786
(860) 589-7502

Distributor:

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

Product Name: **Super Shock**
Synonyms: Hypochlorous Acid, Calcium Salt; Losantin; Calcium Hypochloride; Chlorinated Lime

Chemical Name: Calcium Hypochlorite

Chemical Formula: CaCl_2O_2

CAS Number: 7778-54-3

Product Use: Oxidize swimmer waste and raises the chlorine levels in pool water.

SECTION 2 **HAZARDOUS COMPONENTS**

EMERGENCY OVERVIEW

Danger



Hazard Statement(s)

- H272: May Intensify fire; Oxidizer
- H302: Harmful if swallowed
- H314: Causes severe skin burns and eye damage
- H410: Very toxic to aquatic life with long lasting effects

Precautionary Statement(s)

- P210: Keep away from heat.
- P220: Keep/Store away from clothing/combustible materials.
- P221: Take any precaution to avoid mixing with combustibles.
- P260: Do not breathe dust or mist.
- P264: Wash skin thoroughly after handling.
- P270: Do not eat, drink or smoke when using this product.
- P273: Avoid release to the environment.
- P280: Wear protective gloves/ protective clothing/ eye protection/ face protection.
- P321: Specific treatment (see First Aid Measures on this label).

POTENTIAL HEALTH EFFECTS

Inhalation: Dust and mist irritate the nose and throat. In confined areas, mechanical agitation can result in high levels of dust, and reaction with incompatibles materials (ie: acids and water/moisture) can result in high concentrations of chlorine vapor, either of which may result in burns to the respiratory tract, producing lung edema, shortness of breath, wheezing, choking, chest pains, impairment of lung function, and possible permanent lung damage. Lung toxin. Toxic by inhalation.

Skin Contact/Absorption: Calcium hypochlorite dust and solutions cause irritation and in severe cases, chemical burns, which are characterized by redness, swelling, and scab formation. Moisture from perspirations will accelerate tissue destruction.

Eye Contact: Exposure to calcium hypochlorite can cause eye irritation and vision impairment. Contact can



SAFETY DATA SHEET
Super Shock - 0020

produce impairment of vision and corneal damage. Corrosive to eyes.

SECTION 2 **HAZARDOUS COMPONENTS - Continued**

Ingestion: When ingested, there will be burning of the mouth and throat. Can cause abdominal cramps, vomiting, diarrhea, nausea, and/or tissue ulceration which may lead to convulsions, coma, and even death.

Exposure Limits: Ceiling= 3mg/m³ as chlorine

SECTION 3 **COMPOSITION / INFORMATION ON INGREDIENTS**

<u>Component</u>	<u>CAS Number</u>	<u>Percent</u>
Calcium Hypochlorite	7778-54-3	65%

SECTION 4 **FIRST-AID MEASURES**

General Advice: Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

Notes to Physician: Probable mucosal damage may contraindicate the use of gastric lavage.

Inhaled: Remove victim to fresh air. Give artificial respiration only if breathing has stopped. If breathing is difficult, give oxygen. Seek immediate medical attention.

Skin Contact: Remove contaminated clothing. Wash affected area with soap and water for 15-20 minutes. Seek medical attention if irritation occurs or persists.

Eye Contact: Check for and remove contact lenses. Flush immediately with water for at least 20 minutes. Forcibly hold eyelids apart to ensure complete irrigation of eye tissue. Seek immediate medical attention.

Ingestion: Call a poison control center or doctor immediately for treatment advice. 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.

SECTION 5 **FIRE FIGHTING MEASURES**

Extinguishing Media

Conditions of Flammability: 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 a strong oxidizer which is capable of intensifying a fire once started. Product is not known to be flammable, combustible or pyrophoric.

Means of Extinction: Drench with water only, and cool surrounding products and area with water. Do not use dry extinguishers containing ammonium compounds.

Flash Point: Not Applicable

Auto-ignition Temperature: Not Applicable

Upper Flammable Limit: Not Applicable

Lower Flammable Limit: Not Applicable

Hazardous Combustible Products: Chlorine, oxygen, and chlorine monoxide at higher temperatures.



SAFETY DATA SHEET
Super Shock - 0020

Water in contact with hot calcium hypochlorite can release hydrochloric acid or chlorine gas.

Special Fire Fighting Procedures: Wear NIOSH-approved self-contained breathing apparatus and protective clothing.

SECTION 5 **FIRE FIGHTING MEASURES - Continued**

Explosion Hazards: Not sensitive to mechanical impact or static discharge.

Suitable Extinguishing Media: Dry powder

Special hazards arising from the substance or mixture: Hydrogen chloride gas, Calcium oxide

Advice For Firefighters: Wear self contained breathing apparatus for fire-fighting if necessary.

SECTION 6 **ACCIDENTAL RELEASE MEASURES**

Leak/Spill: 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.

Personal Precautions, Protective Equipment and Emergency Procedures: Wear respiratory protection. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust. For personal protection see section 8.

Environmental Precautions: Prevent further leakage or spillage if safe to do so. Prevent material from entering sewers and advise local authorities of any contaminated water release. Flush with water to remove any residue. Discharge into the environment must be avoided.

Methods and materials for containment and cleaning up: 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 assure decontamination (i.e. removal of all product) before disposal. Place all undamaged packaging in a clean, dry container properly marked and labeled.

SECTION 7 **HANDLING AND STORAGE**

Precautions for Safe Handling: Use proper equipment for lifting and transporting all containers. Use sensible industrial hygiene and housekeeping practices. Wash thoroughly after handling. Avoid all situations that could lead to harmful exposure. Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. Keep away from sources of ignition – No smoking. Keep away from heat and sources of ignition. For precautions see section 2.2.

Conditions for safe storage, including any incompatibilities: Keep container tightly closed in a dry and well-ventilated place. 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. Keep out of the sun. 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.



SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION
--

Components with workplace control parameters: Contains no substances with occupational exposure limit values.

Exposure Controls

Appropriate Engineering Controls: Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Ventilation Requirements: Mechanical ventilation (dilution or local exhaust), process or personnel enclosure, and control of process conditions should be provided. Supply sufficient replacement air to make up for air removed by exhaust systems.

Other: Emergency shower and eyewash should be in close proximity.

Personal Protective Equipment

Eye/Face Protection: Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin Protection: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Body Protection: Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory Protection: Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of Environmental Exposure: Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

EXPOSURE GUIDELINES

Permissible Exposure Limits						
Ingredient CAS No.	OSHA		WISHA		ACGIH (TLV)	
	TWA	STEL	TWA	STEL	TWA	STEL
7778-54-3	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable



SECTION 9 **PHYSICAL AND CHEMICAL PROPERTIES**

Appearance:	Form: powder Color: beige
Odor:	Chlorine Odor
Odor Threshold:	~ 1.4 mg/m ³ based on chlorine
pH:	10.4-10.8
Specific Gravity:	2.35 @ 20 °C
% Volatiles By Volume:	@21 °C (70 °F): 0
Melting Point/Freezing Point:	Melting point/range: 100 °C (212 °F) - lit.
Initial Boiling Point and Boiling Range:	Not Available
Flash Point:	Not Applicable
Evaporation Rate:	Not Available
Flammability (solid, gas):	Not Available
Upper/Lower Flammability or Explosive Limits:	Not Available
Vapor Pressure:	Not Available
Vapor Density:	6.9
Relative Density:	2.35 g/cm ³ at 25 °C (77 °F)
Bulk Density:	0.8 g/cm ³
Water Solubility:	18% at 25 °C
Partition Coefficient (n-octanol/water):	Not Available
Auto-ignition Temperature:	Not Available
Decomposition Temperature:	170 - 180 °C
Viscosity:	Not Available
Explosive Properties:	Not Available
Oxidizing Properties:	The substance or mixture is classified as oxidizing with the category 2.

SECTION 10 **STABILITY AND REACTIVITY**

Reactivity: Not Available

Stability: Stable in optimum storage conditions. Heat, sunlight and contamination could cause decomposition. Product is not sensitive to mechanical shock or impact. Product is not sensitive to electrical static discharge. Product is an NFPA Class 3 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.

Incompatibility: Acids, reducing agents, combustible materials such as wood, cloth, or organic materials, dry powder fire extinguishers containing monoammonium phosphate, metals such as iron and copper and their alloys, water or steam, ammonia, urea, amines. 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.



SAFETY DATA SHEET
Super Shock - 0020

Possibility of Hazardous Reactions: Not Available
Conditions to Avoid: Not Available
Incompatible Materials: Incompatible with acids. Strong reducing agents.

Hazardous Decomposition Products: Water in contact with calcium hypochlorite releases chlorine gas. Contact with incompatibles presents an explosion and fire hazard. Toxic or corrosive fumes may be liberated. These include chlorine gas.

Polymerization: Will not occur

SECTION 11 **TOXICOLOGICAL INFORMATION**

Irritancy: Dry material causes moderate skin irritation. Wet material causes skin burns. Corrosive to eyes.

Sensitization: This material is not known or reported to be a skin or respiratory sensitizer.

Chronic/Acute Effects: Skin irritation may occur from repeated or prolonged skin contact. Chronic inhalation exposure may cause impairment of lung function and permanent lung damage. Asthma, respiratory and cardiovascular disease may be aggravated by exposure to this chemical.

Synergistic Materials: Not available

Animal Toxicity Data: LC50(inhalation, rat, 1 hour)= 1300mg/m³ based on chlorine
LD50(oral, rat)= 850mg/kg. Investigated as a tumorigen and mutagen.
LD50(dermal, rabbit)= > 2000mg/kg

Germ Cell Mutagenicity: Hamster
fibroblast
Cytogenetic analysis

Carcinogenicity

IARC: 3 - Group 3: Not classifiable as to its carcinogenicity to humans (Calcium hypochlorite)

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive Toxicity: Not reported to show reproductive toxicity.
Teratogenicity: Results in laboratory analysis show it is not a teratogen.
Mutagenicity: Results in laboratory analysis show it is not a mutagen.
Specific Target Organ Toxicity - Single Exposure: Not Available
Specific Target Organ Toxicity - Repeated Exposure: Not Available
Aspiration Hazard: Not Available

SECTION 12 **ECOLOGICAL INFORMATION**

Fish Toxicity: Highly toxic to fish and other aquatic organisms.

LC50(bluegill, 96 hour)= 0.088mg/L
LC50(rainbow trout, 96 hour)= 0.16mg/L
LC50(daphnia magna, 48 hour)= 0.11mg/L

Biodegradability: Not available
Environmental Effects: Not available
Persistence and Degradability: Not Available
Bioaccumulative Potential: Not Available
Mobility in Soil: Not Available

Results of PBT and vPvB Assessment: PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

Other Adverse Effects: Very toxic to aquatic life. An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

SECTION 13 **DISPOSAL CONSIDERATIONS**

Waste Treatment Methods: Dispose in accordance with all federal, provincial, and/or local regulations including the Canadian Environmental Protection Act.

Product: Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

Contaminated Packaging: Dispose of as unused product.

SECTION 14 **TRANSPORTATION DATA**



DOT: **UN Number:** 1748
UN Proper Shipping Name: CALCIUM HYPOCHLORITE, DRY
Transport Hazard Class: 5.1
Packing Group: II

TDG: **UN Number:** 1748
UN Proper Shipping Name: CALCIUM HYPOCHLORITE, DRY
Transport Hazard Class: 5.1
Packing Group: II

MEX: **UN Number:** 1748
UN Proper Shipping Name: CALCIUM HYPOCHLORITE, DRY
Transport Hazard Class: 5.1
Packing Group: II

IMDG: **UN Number:** 1748
UN Proper Shipping Name: CALCIUM HYPOCHLORITE, DRY
Transport Hazard Class: 5.1
Packing Group: II
EMS-No: F-H, S-Q



SAFETY DATA SHEET
Super Shock - 0020

IATA: **UN Number:** 1748
 UN Proper Shipping Name: CALCIUM HYPOCHLORITE, DRY
 Transport Hazard Class: 5.1
 Packing Group: II

SECTION 15 **REGULATORY INFORMATION**

WHMIS Classification: C, E

NSF Certification: Product is certified under ANSI/NSF Standard 60 for disinfection, oxidation and algaecide treatment at a maximum dosage of 15mg/L.

SARA 302 Components: SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components: 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.

SARA 311/312 Hazards: Reactivity Hazard, Acute Health Hazard

Massachusetts Right To Know Components:	CAS-No.	Revision Date
Calcium hypochlorite	7778-54-3	1993-04-24

Pennsylvania Right To Know Components:	CAS-No.	Revision Date
Calcium hypochlorite	7778-54-3	1993-04-24

New Jersey Right To Know Components:	CAS-No.	Revision Date
Calcium hypochlorite	7778-54-3	1993-04-24

California Prop. 65 Components: This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

SECTION 16 **ADDITIONAL INFORMATION**

HMIS Rating

Health Hazard:	3
Flammability:	0
Physical Hazard	2

NFPA Rating

Health Hazard:	3
----------------	---



SAFETY DATA SHEET
Super Shock - 0020

Fire Hazard: 0
Reactivity Hazard: 2
Special Hazard.I: OX

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.

Date: 5/19/2015
Phoenix Products Company