# Material Safety Data Sheet

## 1. Product and Company Identification

Effective Date: 05-06-2004
Revision: 00

**SCORCH, JCH, SHOCK**

**Principal Use:** Swimming Pool Sanitizer

**Description:** White granules with chlorine odor


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**Only in the Event of a Transportation Emergency Involving Spills, Leaks, Fires or Accidents, call CHEMTREC at (800) 424-9300.**

## 2. Composition/Information on Ingredients

| Ingredients: | %(w/w) | OSHA PEL |
|---|---|---|
| Calcium hypochlorie (CAS 7778-54-3) | >65 | Not Listed |
| Calcium chlorate (CAS 10137-74-3) | <2 | Not Listed |
| Calcium carbonate (CAS 471-34-1) | <2 | Not Listed |
| Calcium hydroxide (CAS 1305-62-0) | <2 | Not Listed |

Ingredients not precisely identified are proprietary or non hazardous. Values are not product specifications.

## 3. Hazards Identification

Emergency Overview

Appearance:

White granules with slight chlorine odor

Physical Hazards:

Strong oxidizing agent

Health Hazards:

Danger! Corrosive. Causes severe and irreversible burns to eye and skin. Harmful if inhaled. May cause irritation and inflammation to the respiratory tract. Harmful or fatal if swallowed.

* Hazard summary defined by OSHA Hazard Comm. Std., 29 CFR 1910.1200.

Potential Health Effects:

General:

This health hazard assessment based on information from commercial and scientific literature.

Ingestion:

If swallowed, causes severe burns to the digestive tract and can be fatal.

Eye Contact:

Corrosive to eyes. Contact of calcium hypochlorie dust with the eyes, even a minute amount for a short duration, can cause severe irritation and even blindness.

Skin Contact:

Contact with the skin may cause severe irritation, burns, or tissue destruction.

Skin Absorption:

This product will probably not be absorbed through human skin.

Inhalation:

Inhalation of calcium hypochlorite dust and deposition of particles in the respiratory tract can lead to irritation of the tissue and cause a variety of effects. These effects are dependent on concentration and include: upper respiratory tract irritation, nasal congestion, coughing, sore throat, laryngitis and shortness of breath. In operations where there are high concentrations of respirable particulates, pulmonary edema (fluid in the lung) may be produced. If not treated immediately, pulmonary edema can be life threatening. Since this product is in granular or tablet form, particles of respirable size are not generally encountered.

## 4. First Aid Measures:

First Aid - Eyes:

Remove contact lenses and pour a gentle stream of warm water through the affected eye for at least 15 minutes. Contact a poison control center, emergency room or physician right away as further treatment will be necessary.

First Aid - Skin:

Run a gentle stream of water over the affected area for 15 minutes. A mild soap may be used if available. Contact a poison control center, emergency room or physician right away as further treatment will be necessary.

First Aid - Ingestion:

Gently wipe or rinse the inside of the mouth with water. Sips of water may be given if person is fully conscious. Never give anything by mouth to an unconscious or convulsing person. Do not induce vomiting. Contact a poison control center, emergency room or physician right away as further treatment will be necessary.

First Aid - Inhalation:

Remove person from area to fresh air. If symptomatic, contact a poison control center, emergency room or physician as further treatment will be necessary.

## 5. Fire Fighting Measures

Flashpoint and Method:

Will not flash

Autoignition Temperature:

Not applicable

Explosive Limits:

Not applicable

General Hazards:

Product decomposes at approximately 338-356 deg. F. (170-180 deg. C.) releasing oxygen gas. Containers maty rupture.

Fire Fighting Instructions:

Emits toxic fumes under fire conditions. Drench with large quantities of water only. Do not use dry chemicals or foams. Product supplies its own oxygen, therefore attempts to smother fire with a wet blanket, carbon dioxide, dry chemical extinguisher or other means are not effective.

Fire Fighting Equipment:

Fire-fighters must wear NIOSH approved pressure demand, self-contained breathing apparatus with full face piece for possible exposure to hazardous gases.

Hazardous Combustion Products:

Emits toxic fumes under fire conditions. Product decomposes at approximately 338-356 deg.F. (170-180 deg. C.) releasing oxygen gas.

## 6. Accidental Release Measures

Spill Measures:

Use extreme caution in handling spilled material. Do not mix with any other chemicals. Contamination with moisture, acids, organics or other easily combustible materials such as petroleum, paint products, wood or paper may cause fire or violent decomposition. If fire or decomposition occurs in area of spill, immediately douse with plenty of water. Otherwise sweep up all visible material usinga clean (new, if possible), dry shovel and broom and dissolve material in water. Spilled material that has been swept up and dissolved in water should be used immediately in the normal application for which this product is being consumed.

## 7.Handling and Storage

Handling:

Do not get in eyes, on skin, or on clothing. Avoid breathing dust. Irritating to nose and throat. Do not swallow. Do not eat, drink or smoke in work area. Wash hands after handling. Remove and wash contaminated clothing before reuse. Keep out of reach of children.

Use only a clean (new, if possible), dry scoop made of metal or plastic each time product is taken from the container. Do not add this product to any dispensing device containing remnants of any other product. Such use may cause violent reaction leading to fire or explosion. Add this product only to water. Never add water to prooduct. Always add the product to large quantities of water. May cause fire or explosion if mixed with other chemicals. Fire may result if contaminated with acids, organic materials and other easily combustible materials such as oil, kerosene, gasoline, paint products, wood and paper. Do not reuse container. Residual material remaining in empty container can react to cause fire. Thoroughly flush empty container with water and then destroy by placing in trash collection. Do not contaminate water, food, or feed by storage or disposal of this product.

Storage:

Store in a cool, dry, well-ventilated place. Keep in original container. Keep container closed when not in use. Keep away from heat, sparks, flames, direct sunlight and other sources of heat, including lighted tobacco products.

## 8. Exposure Controls/Personal Protection

Exposure Guidelines:

No ACGIH TLV or OSHA PEL assigned to this product. The OSHA PELand ACGIH TLV for calcium hydroxide are 5 mg/m3 (TWA). The OSHA PELs for calcium carbonate are 15 mg/m3

(total dust) and and 5 mg/m3 (respirable dust). The OSHA PELs for calcium carbonate are 10 mg/m3 (total dust) and 5 mg/m3 (respirable dust). The ACGIH TLVs for calcium carbonate are 10 mg/m3 (total dust) and 3 mg/m3 (respirable nuisance particulte).

**Engineering Controls:**

Use local exhaust or general room/dilution ventilation sufficient to maintain employee exposure below permissible exposure limits.

**Respiratory Protection:**

Where the potential for exposure to dust exists, use the appropriate regulatory compliant full facepiece air-purifying respirator with acid gas cartridge and particulate prefilter. Carefully read and follow the respirator manufacturer's instructions and information.

**Protective Clothing:**

Boots, apron, or chemical suits should be used when necessary to prevent skin contact. Use butyl rubber, neoprene or nitrile gloves to prevent skin contact.

**Eye Protection:**

Splashproof goggles and faceshield

## 9. Chemical and Physical Properties

| | |
|---|---|
| **Appearance:** | White granules with slight chlorine odor |
| **Boiling Point:** | Decomposes @ approximately 338-356 deg. F. (170-180 deg. C.) |
| **Vapor Pressure:** | No data |
| **Vapor Density:** | No data |
| **Solubility in Water:** | 217 g/l @ 27 deg. C. |
| **pH:** | Alkaline |
| **Specif. Grav./Density:** | 65-67 lbs./cu. Ft. |
| **% Volatile:** | No data |

## 10. Stability and Reactivity

**Stability:**

Unstable above 338 deg. F. (170 deg. C.).

**Incompatibility:**

Contamination. Excessive heat above 338 deg. F. (170 deg, C.). Moisture. Acids. Reducing agents. Organics. Combustible materials. Petroleum products. Paint products. Wood and paper.

**Hazardous Decomposition Products:**

Acid or ammonia contamination will release toxic gases. Excessive heat will cause decomposition resulting in the release of oxygen and chlorine gas.

**Hazardous Polymerization:**

Will not occur.

## 11. Toxicological Information

**Possible Human Health Effects:**

**Inhalation:**

No mortality at 3.5 mg/l (rat) (1 hour). Slight to very low toxicity. Inhalation of calcium hypochlorite dust and deposition of particles in the respiratory tract can lead to irritation of

the tissue and cause a variety of effects. These effects are dependent on concentration and include: upper respiratory tract irritation, nasl congestion, coughing, sore throat, laryngitis and shortness of breath. In operations where there is high concentrations of respirable particulates, pulmonary edema (fluid in lung) may be produced. If not treated immediately, pulmonary edema can be life threatening. Since this product is in granular or tablet form, particles of respirable size are not generally encountered.

Skin Contact:

The acute dermal LD50 is >1,000 mg/kg (rabbit). Slight to very low toxicity by absorption. Corrosive to skin. Causes severe and irreversible burns to skin. In studies utilizing rabbits, the skin irritation score was 8/8.

Eye Contact:

Corrosive to eyes. Contact of calcium hypochlorite dust with the eyes, even a minute amount for a short duration, can cause severe irritation and even blindness. In studies utilizing rabbits, the eye irritation score was 98.5/110.

Ingestion:

The acute oral LD50 is 850 mg/kg (rat). If swallowed, calcium hypochlorite causes severe burns to the digestive tract and can be fatal.

Other Effects of Overexposure:

Genotoxicit - Calcium hypochlorite produced positive responses in in-vitro assays using bacterial systems (the Ames test) and chromosomal aberrations in Chinese hamster fibroblasts. In a whole animal experiment (mouse micronucleus test), exposures ranging from 20 to 160 mg/kg produced no compound related chromosomal abnormalities.

Carcinogenisis - Although no study has been conducted with calcium hypochlorite, the carcinogenic potential of sodium hypochlorite was studied in F-344 rats. After 104 weeks of drinking water containing up to 2,000 ppm sodium hypochlorite, there was no evidence that this chemical produced any carcinogenic response. In addition, this exposure did not result in any adverse effects.

Note to Physician:

Not applicable

## 12. Ecological Information

Using bluegills, the LC50 was 0.088 mg/l (96 hour). This product is very toxic to aquatic organisms.

## 13. Disposal Consideration

Disposal Method:

Spilled material that has been swept up and dissolved in water should be used immediately in the normal application for which this product is used. If this is not possible, dissolve material in water and carefully neutralize dissolved material by adding hydrogen peroxide (one pint of 35% hydrogen peroxide solution per pound of calcium hypochlorite to be neutralized) then dilute the neutralized material with plenty of water and flush to sewer. NOTE: Only properly neutralized material should be flushed to sewer. Unneutralized material can cause environmental damage to receiving water or can interfere with treatment plant operation. Care must be taken when using or disposing of chemical material and/or their containers to prevent environmental contamination. It is your duty to dispose of the chemical materials and/or their containers in accordance with the U.S. Clean Air Act, the Clean Water Act, the Resource Conservation and Recovery Act, as well as any other relevant Federal, State, or local laws/regulations regarding disposal.

**Container Disposal:**

Do not reuse container. Residual material remaining in empty container can react to cause fire. Thoroughly flush empty container with water and then destroy by placing in trash collection.

## 14. Transport Information

**DOT Hazard Description:**

DOT Hazard Description
Proper Shipping Name: CALCIUM HYPOCHLORITE, HYDRATED
Hazard Class: 5.1
Identification Number: UN 2880
Packing Group: II
Hazardous Substance (RQ): 10 lbs. (calcium hypochlorite)
Placard/Label: OXIDIZER

## 15. Regulatory Information

**TSCA (Toxic Substances Control Act) Regulations, 40 CFR 710:**

All ingredients are listed on the TSCA Chemical Substances Inventory. This product is registered with EPA as a pesticide.

**CERCLA and SARA Regulations (40 CFR 355, 370, 372):**

This product does not contain any chemicals subject to the reporting requirements of SARA Section 313.

**California Proposition 65:**

None

## 16. Other Information

The information herein is given in good faith, but no warranty, expressed or implied, is made.

**HMIS and NFPA Ratings**

| Hazard: | HMIS Ratings: | NFPA Ratings: |
|---|---|---|
| Health: | 3 | 3 |
| Flammability: | 1 | 1 |
| Reactivity: | 1 | 1 |

**HMIS and NFPA Hazard Rating Codes:**

0 - Least 1 - Slight 2 - Moderate 3 - High 4 - Severe

NOTE: These HMIS and NFPA Ratings are for "new" product. See appropriate sections of this MSDS for specific hazard information and safe handling instructions.