

# MATERIAL SAFETY DATA SHEET

## SECTION 1 - CHEMICAL PRODUCT and COMPANY IDENTIFICATION

**PRODUCT NAME:** Calcium Hypochlorite

**DATE ISSUED:** 06/01/04

**SUPERSEDES:** 08/25/99

**DESCRIPTION:** Calcium Hypochlorite pellets, tablets, and granules

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**EMERGENCY TELEPHONE:** 24 hours a day, 7 days a week, CHEMTREC: 800-424-9300

## SECTION 2 - COMPOSITION and INFORMATION ON INGREDIENTS

<u>INGREDIENT</u>	<u>CAS NUMBER</u>
Calcium Hypochlorite 60-68%	7778-54-3
Inerts 32-40%	1305-62-0

**CHEMICAL FAMILY:** Salt of Hypochlorous Acid

**MOLECULAR FAMILY:** Ca(OCL)<sub>2</sub>

**PIN-UN/NA NUMBER:** UN1748, UN2880

**PRODUCT USE:** Disinfection in swimming pools and drinking water supplies, treatment of industrial cooling water, slime control, odor control, sewage and waste water treatment.

## SECTION 3 - FIRST AID MEASURES

**INHALATION:** Remove source of contamination or move victim to fresh air. If breathing has stopped, trained personal should begin artificial respiration or, if the heart has stopped, begin cardiopulmonary resuscitation (CPR) immediately.

**SKIN:** As quickly as possible, flush contaminated area with lukewarm, gently running water for at least 15 minutes. Under running water, remove contaminated clothing, shoes and leather goods. Obtain medical attention immediately.

**EYES:** Immediately flush the contaminated eye(s) with lukewarm, gently running water for 20 minutes, holding the eye(s) open. Take care not to rinse contaminated water into non-affected eye. Obtain medical attention immediately.

**INGESTION:** Never give anything by mouth if victim is rapidly losing consciousness, or if unconscious or convulsing. Have the victim rinse mouth thoroughly with water. Do not induce vomiting. Have victim drink one cup of water to dilute the material on the stomach. If vomiting occurs naturally, rinse mouth and repeat administration of water. If breathing has stopped, trained personal should begin artificial respiration or, if the heart has stopped, begin cardiopulmonary resuscitation (CPR) immediately.

## **SECTION 4 - HEALTH HAZARD INFORMATION**

### **ROUTE OF ENTRY AND EFFECTS OF SHORT TERM (ACUTE) EXPOSURE**

**INHALATION:** Dust and mist irritate the nose and throat. When mixed with acids, chlorine gas is released. The gas causes irritation of the respiratory tract. Prolonged exposure to high concentrations of chlorine gas may result in severe lung damage.

**EYE CONTACT:** Exposure to calcium hypochlorite can cause eye damage. Concentrated solutions cause burns which may result in permanent eye damage if not promptly treated.

**SKIN CONTACT:** Calcium hypochlorite dust and solutions can cause irritation, and in severe cases, chemical burns.

**INGESTION:** When ingested, there will be burning in the mouth and throat. Calcium hypochlorite can cause abdominal cramps and nausea which may lead to convulsions, coma and death.

### **ROUTE OF ENTRY AND EFFECTS OF LONG TERM (CHRONIC) EXPOSURE**

Skin irritation may occur from repeated or prolonged skin contact.

#### **EXPOSURE LIMITS:**

**TIME WEIGHTED AVERAGE (TLV-TWA)-** Not available.

**IRRITANCY-** Not available.

**SENSITIZATION OF PRODUCTS:** Not available.

## **SECTION 5 - ACCIDENTAL RELEASE MEASURES**

**SPILL AND LEAK PROCEDURES:** Restrict access to area until completion of clean up. Wear adequate personal protective equipment. Extinguish or remove all ignition sources. Ventilate area.

**CLEAN UP:** Do not touch spilled material. Prevent material from entering sewers or confined spaces. Shovel into clean, dry, labeled containers. Flush area with water. Contaminated materials may be dissolved in water, then treated with a reducing agent such as sodium sulfite. Care should be taken while handling contaminated materials, due to fire risk.

## **SECTION 6 - HANDLING AND STORAGE**

**HANDLING PROCEDURES:** Avoid generating dust. Avoid mixing pure material with contaminated material. Use smallest possible amount in designated areas with adequate ventilation.

**STORAGE REQUIREMENTS:** Store in original container. Store tightly closed container in a clean, cool, open or well ventilated area. Keep out of sunlight.

## **SECTION 7 - EXPOSURE CONTROLS and PERSONAL PROTECTION**

**RESPIRATORY PROTECTION:** Dust mask or NIOSH approved canister type respirators suitable for chlorine.

**EYE/FACE PROTECTION:** Chemical safety goggles. A face shield may be necessary.

**SKIN PROTECTION:** Impervious gloves, body suits, boots, and/or other resistant protective clothing. Having a Safety shower/eye wash fountain readily available in the immediate work area.

MATERIALS FOR PROTECTIVE CLOTHING: Butyl rubber, natural rubber, neoprene, nitrile, polyvinyl chloride; polyurethane; polyvinyl chloride.

ENGINEERING CONTROLS: Local exhaust ventilation required where exposure to dust might occur.

## **SECTION 8 - PHYSICAL AND CHEMICAL PROPERTIES**

PHYSICAL STATE, COLOR AND ODOR: solid, white, strong chlorine odor

pH as is: 11.5 (5% solution ); MELTING POINT/RANGE: decomposes at temperatures above 100° C; SPECIFIC GRAVITY: 2.00 @ 20° C (water = 1 @ 40° C); BOILING POINT: not applicable; ODOR THRESHOLD: not available; VAPOR PRESSURE: not applicable; VAPOR DENSITY: not applicable; EVAPORATION RATE: not applicable; COEFFICIENT OF WATER/OIL DISTRIBUTION: not applicable

SOLUBILITY IN WATER: Insoluble in water

EVAPORATION RATE (BUTYL ACETATE=1): None.

## **SECTION 9 - TOXICOLOGICAL INFORMATION**

ANIMAL TOXICITY DATA: AC50- (Inhalation, rats) 148 mg/l; LD50- (Oral, rats) 1300 mg/kg  
CARCINOGENICITY: Not carcinogenic (LARC and ACGIH)

REPRODUCTIVE TOXICITY: Not available

NAME OF TOXICOLOGICALLY SYNERGISTIC PRODUCTS: Not available

## **SECTION 10 - DISPOSAL CONSIDERATIONS**

WASTE DISPOSAL: Consult appropriate Federal, State/Provincial and local regulatory authorities to ascertain proper disposal procedures. Care should be taken not to mix waste calcium hypochlorite with incompatible material. Calcium hypochlorite should be dissolved in water, and the available chlorine treated using a reducing agent such as sodium sulfite.

## **SECTION 11 - TRANSPORTATION INFORMATION:**

SPECIAL SHIPPING REQUIREMENTS: Transportation in the USA is governed by the Department of Transportation (DOT). Refer to DOT regulations (CFR 49) for a special shipping requirements for calcium hypochlorite (UN #'s UN1748, UN2880). Transportation in Canada is governed by Transport Canada. Refer to the Transportation of Dangerous Goods (TDG) Regulations for special shipping requirements for calcium hypochlorite.

The information contained herein is to the best of our knowledge and belief accurate. However, since the conditions of handling and use are beyond our control, Tramfloc, Inc. makes no guarantee for results obtained, and assumes no responsibility for damages incurred by use of this product. It is the responsibility of the user to comply with all federal, state, and local laws and regulations.