

1 PRODUCT & COMPANY IDENTIFICATION

Product Name: Calcium Hypochlorite
Synonyms: Calcium Oxychloride, Bleaching powder, Chlorinated Lime and Granulated Chlorine
INCI Name: Calcium Hypochlorite
CAS Number: 7778-54-3
Chemical Formula: CaCl₂O₂
Product Form: Solid
Product Use: Sterilization, disinfection.

Supplier: ASES CHEMICAL WORKS.
Address: Brahm Bagh, Jalori Gate
Jodhpur - 342001 Rajasthan-India
Phone: +91-9636889954
Web: www.ases.in **Email:** ecom@ases.in

2 HAZARDS IDENTIFICATION

Most important hazard: Mild Irritant
Safety Phrases: Keep out of reach of children. In case of contact with skin wash immediately with plenty of water.

3 COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS No	EC Number	Molecular Weight	Concentration
Calcium Hypochlorite	7778-54-3	231-908-7	142.98	70%

Hazardous components
Calcium hypochlorite
Ox. Sol. 2; Acute Tox. 4; Skin Corr. 1B; Eye Dam. 1; Aquatic Acute 1; Aquatic Chronic 1; H272, H302, H314, H410

4 FIRST AID MEASURES

General advice: Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.
If inhaled: If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
Skin contact: Take off contaminated clothing and shoes immediately. Wash off with plenty of water. Consult a physician.
Eye contact: Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. Continue rinsing eyes during transport to hospital.
Swallowed: Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

5 FIRE-FIGHTING MEASURES

Suitable extinguishing media: Dry powder
Special hazards arising from the substance or mixture: No data available
Advice for firefighters: Wear self-contained breathing apparatus for firefighting if necessary.
Further information: No data available

6 ACCIDENTAL RELEASE MEASURES

Personal Precautions: Wear respiratory protection. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.
Environmental Precautions: Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.
Clean up procedure: Sweep up and shovel. Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet brushing and place in container for disposal according to local regulations. Do not flush with water. Keep in suitable, closed containers for disposal.

7 HANDLING & STORAGE

Handling: Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Further processing of solid materials may result in the formation of combustible dusts. The potential for combustible dust formation should be taken into consideration before additional processing occurs.
Storage: Keep container tightly closed in a dry and well-ventilated place. Never allow product to get in contact with water during storage. Do not store near acids. Keep in a dry place.

MATERIAL SAFETY DATA SHEET

CALCIUM HYPOCHLORITE

8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering controls	Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.
Eye/face protection	Wear face shield or eye protection in combination with breathing protection.
Skin protection	Protective gloves. Protective clothing.
Respiratory protection	Use local exhaust or breathing protection.
Thermal hazards	no data available

9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance	White, free flowing granular solid	Vapour Pressure	Not applicable
Odor	Strong chlorine odor	Vapour Density	Not applicable
pH(1%)	11.5 (5% solution)	Boiling Point	Not applicable
Melting Point	Decomposes @ temp above 150°C.	Evaporation Rate	Not applicable
Specific Gravity	2.050-2.20@20 °C (Water=1@4°C)	Coefficient of Water/Oil Distribution :	Not applicable

10 STABILITY AND REACTIVITY

Reactivity:	No data available.
Stability:	Stable under recommended storage conditions.
Hazardous reactions :	No data available
Conditions to avoid:	No data available.
Incompatible materials:	Incompatible with acids., Strong reducing agents.
Hazardous decomposition products:	Hydrogen chloride gas, Calcium oxide

11 TOXICOLOGICAL INFORMATION

Acute toxicity	LD50 Oral - Rat - 850 mg/kg	Inhalation: No data available	Dermal: No data available
Skin corrosion/irritation	No data available		
Serious eye damage/eye irritation	No data available		
Respiratory or skin sensitisation	No data available		
Germ cell mutagenicity	Hamster	Fibroblast	Cytogenetic analysis

Carcinogenicity

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

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

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. 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. 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	No data available		
Specific target organ toxicity	Single exposure	No data available	
Specific target organ toxicity	Repeated exposure	No data available	
Aspiration hazard	No data available		
Additional Information	RTECS: NH3485000		

MATERIAL SAFETY DATA SHEET

CALCIUM HYPOCHLORITE

12 ECOLOGICAL INFORMATION

Toxicity to fish LC50 -	Lepomis macrochirus - 0.057 mg/l - 96.0 h
Toxicity to daphnia and other aquatic invertebrates	EC50 - Daphnia magna (Water flea) - 0.067 mg/l - 48 h
Persistence and degradability	No data available
Bioaccumulative potential	No data available
Mobility in soil	No data available
PBT and vPvB assessment	PBT/vPvB assessment not available as chemical safety assessment not required/not conducted
Other adverse effects	An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Very toxic to aquatic life.

13 DISPOSAL CONSIDERATIONS

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.
Contaminated packaging	Dispose of as unused product

14 TRANSPORT INFORMATION

DOT (US)	UN number: 1748	Class: 5.1	Packing group: II	
	Proper shipping name: Calcium hypochlorite, dry			
	Reportable Quantity (RQ): 10 lbs			
	Marine pollutant: Yes	Poison Inhalation Hazard: No		
IMDG	UN number: 1748	Class: 5.1	Packing group: II	EMS-No: F-H, S-Q
	Proper shipping name: Calcium Hypochlorite, Dry			
	Marine pollutant: Yes	Marine pollutant: Yes		
IATA	UN number: 1748	Class: 5.1	Packing group: II	
	Proper shipping name: Calcium hypochlorite, dry			

15 REGULATORY INFORMATION

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

SARA 313 Components 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.

Massachusetts Right To Know Components Calcium hypochlorite CAS-No. 7778-54-3

Pennsylvania Right To Know Components Calcium hypochlorite CAS-No. 7778-54-3

New Jersey Right To Know Components Calcium hypochlorite CAS-No. 7778-54-3

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.

16 OTHER INFORMATION

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and ASES CHEMICAL WORKS assume no liability resulting from its use.