



SHIJIAZHUANG BAIKE CHEMICALS CO., LTD
ADD: NO.4, NORTH OF PING AN STREET, QIAODONG DISTRICT,
SHIJIAZHAUNG
TEL: 86-311-86072621 FAX: 86-311-86073905

Bleaching Powder (M. S. D. S.)

Bleaching powder is used in various industrial applications, including

- Water treatment - disinfecting of drinking water or swimming pool water.
- Used for bleaching cotton and linen
- Used for manufacturing chloroform

Product Identification

Synonyms:

Hypochlorous Acid, Calcium Salt; Losantin; Calcium Hypochloride;
Chlorinated lime

CAS No Molecular Weight Chemical Formula
7778-54-3 142.98 CaCl₂O₂

Composition/Information on Ingredients

Ingredient CAS No Percent Hazardous

Calcium Hypochlorite 7778-54-3 100% Yes

Hazards Identification

Emergency Overview

Danger! Strong oxidizer. Contact with other material may cause fire.
Corrosive. Causes burns to any area of contact. Harmful if swallowed or inhaled. Water reactive.

Health Rating: Moderate

Flammability Rating: 0 - None

Reactivity Rating: Severe (Oxidizer)

Contact Rating: Moderate

Lab Protective Equip: Goggles; Lab Coat; Vent Hood; Proper Gloves

Storage Color Code: Yellow (Reactive)

Potential Health Effects

Inhalation

Corrosive. Extremely destructive to tissues of the mucous membranes and upper respiratory tract. Symptoms may include burning sensation, coughing, wheezing, laryngitis, shortness of breath, headache, nausea and vomiting.



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Inhalation may be fatal as a result of spasm inflammation and edema of the larynx and bronchi, chemical pneumonitis and pulmonary edema

Ingestion

Corrosive. Swallowing can cause severe burns of the mouth, throat, and stomach. Can cause sore throat, vomiting, diarrhea.

Skin Contact

Corrosive. Symptoms of redness, pain, and severe burn can occur.

Chronic Exposure

Repeated exposures to calcium hypochlorite may cause bronchitis to develop with cough and/or shortness of breath.

Aggravation of Pre-existing Conditions

No information found.

First Aid Measures

Inhalation

Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.

Ingestion

If swallowed, DO NOT INDUCE VOMITING. Give large quantities of water. Never give anything by mouth to an unconscious person. Get medical attention immediately.

Skin Contact

Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention immediately. Wash clothing before reuse. Thoroughly clean shoes before reuse.

Eye Contact

Immediately flush eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention immediately.

Fire Fighting Measures

Fire

Not combustible, but substance is a strong oxidizer and its heat of reaction with reducing agents or combustibles may cause ignition. Thermally unstable; at higher temperatures, may undergo accelerated decomposition with release of heat and oxygen.



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Explosion

Sealed containers may rupture when heated. An explosion can occur if either a carbon tetrachloride or a dry ammonium compound fire extinguisher is used to extinguish a fire involving calcium hypochlorite. Sensitive to mechanical impact.

Fire Extinguishing Media

Use flooding quantities of water as fog or spray. Use water spray to keep fire-exposed containers cool. Avoid direct contact with water; reacts with water releasing chlorine gas. Fight fire from protected location or maximum possible distance. Do not use dry chemical fire extinguishers containing ammonium compounds. Do not use carbon tetrachloride fire extinguishers. Do not allow water runoff to enter sewers or waterways.

Special Information

In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode

Accidental Release Measures

Remove all sources of ignition. Keep water away from spilled material. Ventilate area of leak or spill. Wear appropriate personal protective equipment as specified in Section 8. Spills: Clean up spills in a manner that does not disperse dust into the air. Use non-sparking tools and equipment. Pick up spill for recovery or disposal and place in a closed container. Do not seal tightly.

Handling and Storage

Keep in a tightly closed container, stored in a cool, dry, ventilated area. Protect against physical damage and moisture. Isolate from any source of heat or ignition. Avoid storage on wood floors. Separate from incompatibles, combustibles, organic or other readily oxidizable materials. Containers of this material may be hazardous when empty since they retain product residues (dust, solids); observe all warnings and precautions listed for the product

Exposure Controls/Personal Protection

Airborne Exposure Limits

None established.

Ventilation System

A system of local and/or general exhaust is recommended to keep employee



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exposures as low as possible. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, Industrial Ventilation, A Manual of Recommended Practices, most recent edition, for details.

Personal Respirators (NIOSH Approved):

For conditions of use where exposure to the dust or mist is apparent, a half-face dust/mist respirator may be worn. For emergencies or instances where the exposure levels are not known, use a full-face positive-pressure, air-supplied respirator. **WARNING:** Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.

Skin Protection

Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.

Eye Protection

Use chemical safety goggles and/or a full face shield where splashing is possible. Maintain eye wash fountain and quick-drench facilities in work area.

Physical and Chemical Properties

Appearance: White or grayish-white powder.

Odor: Chlorine-like odor.

Solubility: Soluble in water; reacts, releasing chlorine gas.

Specific Gravity: 2.35 @ 20C

pH: No information found.

Boiling Point: No information found

Melting Point: Decomposes above 177C (350F), releasing oxygen.

Vapor Density (Air=1): 6.9

Vapor Pressure (mm Hg): Not applicable.

Evaporation Rate (BuAc=1): No information found

Stability and Reactivity

Stability

Rapidly decomposes on exposure to air. May decompose violently if exposed to heat or direct sunlight. Thermally unstable; decomposes at 177C (350F).

Hazardous Decomposition Products



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Will not occur.

Incompatibilities

Calcium hypochlorite is a strong oxidizer. Reacts with water and acids giving off chlorine gas. Forms explosive compounds with ammonia and amines. Incompatible with organic materials, nitrogen compounds and combustible materials.

Conditions to Avoid

Heat, flame, moisture, dusting, sources of ignition and shock, and incompatibles.

Toxicological Information

Calcium hypochlorite: LD50 oral rat 850 mg/kg. Investigated as a tumorigen and mutagen.

Cancer Lists NTP Carcinogen IARC Category

Calcium Hypochlorite (7778-54-3 No No

Ecological Information

Environmental Fate

No information found.

Environmental Toxicity

No information found.

Disposal Considerations

Whatever cannot be saved for recovery or recycling should be handled as hazardous waste and sent to a RCRA approved waste facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

Transport Information

Domestic (Land, D.O.T.)

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Proper Shipping Name: CALCIUM HYPOCHLORITE MIXTURE, DRY

Hazard Class: 5.1

UN/NA: UN1748 Packing Group: II

Information reported for product/size: 2.5KG

International (Water, I.M.O.) No information found.

Proper Shipping Name: CALCIUM HYPOCHLORITE, DRY

Hazard Class: 5.1

UN/NA: UN1748 Packing Group: II

Information reported for product/size: 2.5KG

Regulatory Information

Chemical Inventory Status NTP Carcinogen IARC Category

Calcium Hypochlorite (7778-54-3 No No

Other Information

NFPA Ratings: Health: 3 Flammability: 0 Reactivity: 1 Other: Oxidizer

Label Hazard Warning

Danger! Strong oxidizer. Contact with other material may cause fire.

Corrosive. Causes burns to any area of contact. Harmful if swallowed or inhaled. Water reactive.

Label Precautions

- Keep from contact with clothing and other combustible materials.
- Store in a tightly closed container.
- Remove and wash contaminated clothing promptly.
- Do not store near combustible materials.
- Do not get in eyes, on skin, or on clothing.
- Do not breathe dust or vapor.
- Keep container closed.
- Use only with adequate ventilation.
- Wash thoroughly after handling.
- Do not contact with water.



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Label First Aid

If swallowed, DO NOT INDUCE VOMITING. Give large quantities of water. Never give anything by mouth to an unconscious person. If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. In case of contact, immediately flush eyes or skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. In all cases get medical attention immediately

Product Use

Laboratory Reagent.