

MATERIAL SAFETY DATA SHEET

SECTION I IDENTIFICATION

Product Name: Calcium Hardness
Chemical Name: Calcium Chloride
C.A.S. Registry #: 10043-52-4
Formula: CaCl_2
DOT Proper Shipping Name: Not a regulated product.
DOT Hazard Class: NA
DOT Identification #: NA
Manufacture: Dow Chemical Company, Midland, Mi. 48674
Telephone: (800) 258-2436
Distributor: Sentry Industries 5687 NW 36th Ave. Miami Fl. 33142
Telephone: (800) 227-2047 (305) 638-0800 (954) 527-4000

SECTION II INGREDIENTS & HAZARDS

Ingredient (s):

Calcium Chloride	77-80%
Sodium Chloride	1-2%
Potassium Chloride	2-3%
Water	15-20%

White to off-white solid flakes. Odorless. Causes eye irritation.

SECTION III PHYSICAL DATA

Physical State: Solid flakes.
Appearance and Odor: White to off-white solid flakes. Odorless.
Spec Gravity: 1.85
Boiling Point: 347°F (174°C)
Freezing Point: Approx. 347°F (174°C)
pH: 7-8
Vapor Pressure (mm Hg): 1.0mmHg @ 20°C/68°F
Vapor Density: NA
Solubility in Water: Very Soluble

SECTION IV FIRE AND EXPLOSION HAZARD

Flash Point: NA

Flammable Limits: Noncombustible

National Fire Rating System (NFPA): NA

Hazard Material Identification System (HMIS): NA

Extinguishing Media: This material does not burn. If exposed to fire from another source, use suitable extinguishing agent for that fire.

Special Fire Fighting Procedures: Evacuate area of fire.

Unusual Fire & Explosion Hazards: Non-combustible.

Additional Information: Wear positive pressure, self-contained breathing apparatus and full protective equipment. Evacuate area of unprotected personnel. Isolate the hazard area and deny unnecessary entry.

SECTION V HEALTH HAZARD DATA

Threshold Limit Value: OSHA PEL & ACGIH TLV

Toxic Limits: - Skin: LD50 >5000 mg/kg (rabbits)

Ingestion: LD50 967-1668 mg/kg (rabbits)

Mutagenicity: Negative

Effects of Overexposure:

Eye Contact: Flakes may cause slight eye irritation. Dust may cause severe irritation with corneal injury. Effects may be slow to heal. When dissolving, the heat produced may cause more intense effects as well as thermal burns.

Skin Contact: Short single exposure not likely to cause significant skin irritation. Prolonged or repeated exposure may cause skin irritation, even burns. May cause more severe response if skin is damp or if material is confined to skin. May cause more severe response if skin is abraded (scratched or cut). When dissolving, the heat produced may cause more intense effects as well as thermal burns. Not classified as a corrosive according to DOT. A single prolonged exposure is not likely to result in the material being absorbed through the skin in harmful amounts.

Inhalation: Vapors are unlikely due to physical properties. Dust may irritate upper respiratory tract

Ingestion: Single dose oral toxicity is considered to be low. Small amounts swallowed incidental to normal handling operations are not likely to cause injury; swallowing amounts larger than that may cause injury. Ingestion may cause gastrointestinal irritation or ulceration.

Emergency and First Aid Procedures:

Eye Contact: Irrigate with water for at least 15 minutes, including under eyelids. Consult medical personnel.

Skin Contact: Remove contaminated clothing. Flush affected area with large amounts of water.

Inhalation: Remove to fresh air if effect occur. Consult a physician.

Ingestion: If swallowed, seek medical attention. Do not induce vomiting unless directed to do so by medical personnel.

Note to Physician: If burn is present, treat as any thermal burn, after decontamination. No specific antidote. Supportive care. Treatment based on judgment of physician in response to reactions of the patient.

SECTION VI REACTIVITY DATA

Stability: Stable. Hygroscopic.

Incompatibility (Materials to Avoid): Corrosive to some metals. Avoid contact with metal such as: brass, mild steel, aluminum, or ferrous metals. Flammable hydrogen may be generated from contact with metals such as zinc or sodium. Avoid contact with sulfuric acid. Heat is generated when mixed with water. Spattering or boiling can occur.

Hazardous Decomposition Products:

Hazardous Polymerization: Will not occur.

Conditions to Avoid: None known.

SECTION VII SPILL OR LEAK PROCEDURES

Steps to be taken if material is Released or Spilled: Sweep or shovel up and place into a suitable and properly labeled container. Wash area with large amounts of water. Flush to sewer with plenty of water, if permitted by applicable disposal regulations.

Waste Disposal Methods: Dispose in accordance with Federal, State, and local regulations.

Chemical additions or otherwise altering the material may make the MSDS incomplete or inappropriate. Waste characterization and disposal compliance is the responsibility of the party generating and disposing of the waste.

Additional Information: This material is categorized EPA as an "immediate health hazard". Plan in advance for such an incident and have the necessary equipment available.

SECTION VIII SPECIAL PROTECTION INFORMATION

Respirator Protection: If dusty conditions prevail, use dust respirators approved by NIOSH.

Ventilation: Local exhaust ventilation - personnel should not be exposed to irritating effects of the dust.

Eye Protection: If exposed to dust, wear chemical goggles. Do not wear contact lenses. Eyes must be protected if dissolving material in water. Eye wash stations should be located in immediate area.

Other Protective Equipment: Wear full work clothing, including long sleeved shirt and trousers for routine product-handling use. Cotton gloves are usually adequate for dry product. For solutions, wear impervious gloves and apron. If contact is repeated or prolonged, wear full impervious clothing.

SECTION IX SPECIAL PRECAUTIONS

Precautions to be taken in Handling and Storage: Store in closed containers. Store in a cool dry area. Protect from physical damage. Utilize local exhaust if there is a dusty or misty conditions exist.

The data in this Material Data Sheet relates only to the specific material designated and does not relate to its use in combination with any other material or process. The data contained is believed to be correct. However, since conditions of use are outside our control, it should not

Revised: 8-26-99

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For additional information, contact our technical service department.