



Columbus Chemical Industries, Inc./ N4335 Temkin Rd./ Columbus, Wisconsin 53925 /414-623-2140

816977  
816978

Entered File: 12/4/86

**MATERIAL SAFETY DATA SHEET**

9586

**A. GENERAL INFORMATION**

TRADE NAME (COMMON NAME OR SYNONYM) FLAKE CALCIUM CHLORIDE POWDERED CALCIUM CHLORIDE		<input checked="" type="checkbox"/> C.A.S. NO.  10035-04-8	
CHEMICAL NAME Calcium Chloride, Dihydrate			
FORMULA CaCl <sub>2</sub> · 2H <sub>2</sub> O		MOLECULAR WEIGHT 147.02	
ADDRESS (No., STREET, CITY, STATE AND ZIP CODE) Columbus Chemical Industries, Inc. N4335 Temkin Road Columbus, WI 53925			
CONTACT Director, Product Safety	PHONE NUMBER (414) 623-2140	ISSUED DATE June 12, 1980	REVISED DATE Mar., 1982

**B. FIRST AID MEASURES**

<p><u>Eyes:</u> Flush promptly with plenty of water, continuing for at least 15 minutes. Get medical attention.</p> <p><u>Inhalation:</u> Remove to fresh air.</p> <p><u>Skin:</u> Wash with plenty of soap and water.</p> <p><u>Ingestion:</u> If conscious, immediately give 2 to 4 glasses of water, and induce vomiting by touching finger to back of throat.</p> <p>Get medical attention for irritation, ingestion, or discomfort from inhalation.</p>	<p>EMERGENCY PHONE NUMBER</p> <p>RECEIVED 90 APR 8 AM 9 28 UNIVERSITY OF WISCONSIN HERRING</p>
--	--

**C. HAZARDS INFORMATION**

HEALTH	
INHALATION Dust or mist inhalation may irritate nose, throat, and lungs.	
INGESTION Low in toxicity, but more toxic than sodium chloride, LD <sub>50</sub> (rat): 1 g/kg.* --Reference (e). May irritate gastrointestinal tract. *anhydrous basis	
SKIN May cause skin irritation. Under conditions of prolonged contact or when moisture is present, superficial burns may result. Contact with abraded skin or cuts can cause severe necrosis.	
EYES May irritate or burn eyes.	
PERMISSIBLE CONCENTRATION: AIR (SEE SECTION J) None established by OSHA. Also, no TLV established by ACGIH.	BIOLOGICAL
UNUSUAL CHRONIC TOXICITY	

**C. HAZARDS (GHS)****FIRE AND EXPLOSION**

FLASH POINT °C Not Flammable	AUTO IGNITION TEMPERATURE °C Not applicable	FLAMMABLE LIMITS IN AIR (% BY VOL.) Not applicable
<input type="checkbox"/> OPEN CUP <input type="checkbox"/> CLOSED CUP		
UNUSUAL FIRE AND EXPLOSION HAZARDS None		

**D. PRECAUTIONS/PROCEDURES**

FIRE EXTINGUISHING AGENTS RECOMMENDED Not applicable
FIRE EXTINGUISHING AGENTS TO AVOID
SPECIAL FIRE FIGHTING PRECAUTIONS None
VENTILATION <u>Local exhaust:</u> In packaging and unloading areas, over open processing equipment, and any other places where dusty or misty condition prevails. <u>Natural ventilation:</u> Adequate for other areas.
NORMAL HANDLING Avoid contact with eyes, skin, or clothing. Avoid breathing dust or mist. Use good personal hygiene and housekeeping.
STORAGE Store in a cool, dry area. Prolonged storage may cause product to cake and become wet from atmospheric moisture.
SPILL OR LEAK Shovel up dry chemical and place in metal drum with a cover. Cautiously spray residue with plenty of water.
SPECIAL: PRECAUTIONS/PROCEDURES/LABEL INSTRUCTIONS Label signal word: WARNING!

RECEIVED  
 30 APR 3 09 9 28  
 UNIV. SER.

**E. PERSONAL PROTECTIVE EQUIPMENT**

RESPIRATORY PROTECTION For dusty or misty condition, wear NIOSH-approved dust or mist respirator.
EYES AND FACE For dusty or misty condition, or when handling solutions where there is reasonable probability of eye contact, wear chemical safety goggles and hat. Under these conditions, do not wear contact lenses.
HANDS, ARMS, AND BODY As a minimum, wear long-sleeve shirt and trousers, boots and gloves for routine product use. Cotton gloves permitted for dry product, impervious gloves when using solutions.
OTHER CLOTHING AND EQUIPMENT Not generally required.

### F. PHYSICAL DATA

MATERIAL IS (AT NORMAL CONDITIONS): <input type="checkbox"/> LIQUID <input checked="" type="checkbox"/> SOLID <input type="checkbox"/> GAS <input type="checkbox"/> _____		APPEARANCE AND ODOR Small white flakes; odorless.	
BOILING POINT    Unknown    °C	SPECIFIC GRAVITY (H <sub>2</sub> O = 1) 0.835	VAPOR DENSITY (AIR = 1) Not applicable: water vapor only.	
MELTING POINT    176    °C	--Reference (b)		
SOLUBILITY IN WATER (% by Weight) 42 (anhydrous) @ 20°C	pH Neutral or slightly alkaline --Reference (c)	VAPOR PRESSURE (mm Hg at 20° C) <input type="checkbox"/> (PSIG) <input type="checkbox"/> Not applicable	
EVAPORATION RATE (Butyl Acetate = 1) <input type="checkbox"/> (Ether = 1) <input type="checkbox"/> Not applicable	% VOLATILES BY VOLUME (At 20° C) Not applicable		

### G. REACTIVITY DATA

STABILITY <input type="checkbox"/> UNSTABLE <input checked="" type="checkbox"/> STABLE	CONDITIONS TO AVOID
INCOMPATIBILITY (MATERIALS TO AVOID) Sulfuric acid: yields hydrogen chloride gas, which is corrosive, irritating, and reactive. Water-reactive materials, such as sodium: cause an exothermic reaction. Methyl vinyl ether: starts runaway polymerization reaction--Reference (d). Zinc as in galvanized iron: yields hydrogen gas with solutions, which may explode under these conditions. --Reference (d).	
HAZARDOUS DECOMPOSITION PRODUCTS None.	
HAZARDOUS POLYMERIZATION <input type="checkbox"/> MAY OCCUR <input checked="" type="checkbox"/> WILL NOT OCCUR	CONDITIONS TO AVOID

### H. HAZARDOUS INGREDIENTS (Mixtures Only)

MATERIAL OR COMPONENT/C.A.S. #	WT. %	HAZARD DATA (SEE SECT. J)
NOT APPLICABLE		<div style="text-align: right;">           RECEIVED            APR 3 9 28 AM '90            UNIV. OF MICHIGAN            LIBRARY         </div>

**I. ENVIRONMENTAL**

DEGRADABILITY/AQUATIC TOXICITY Aquatic toxicity: TLm96: over 1000ppm (anhydrous)--Reference (a)		OCTANOL/WATER PARTITION COEFFICIENT
EPA HAZARDOUS SUBSTANCE? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	IF SO, REPORTABLE QUANTITY: _____ *	40 CFR 116-117
WASTE DISPOSAL METHODS (DISPOSER MUST COMPLY WITH FEDERAL, STATE AND LOCAL DISPOSAL OR DISCHARGE LAWS) Dissolve in water using caution as solution can get very hot. Flush to sewer with plenty of water if permitted by applicable disposal regulations. Waste may have to be disposed of by an approved contractor.		
RCRA STATUS OF UNUSED MATERIAL: Not a "hazardous waste".		40 CFR 261

**J. REFERENCES**

PERMISSIBLE CONCENTRATION REFERENCES		
REGULATORY STANDARDS	D.O.T. CLASSIFICATION: Not regulated	49 CFR
GENERAL (a) NIOSH, <u>Registry of Toxic Effects of Chemical Substances</u> , 1979, Accession No. EV 98 00 000. (b) Weast, R. C. editor, <u>CRC Handbook of Chemistry and Physics</u> , 60th Edition, 1979-80, CRC Press, Inc., Boca Raton 33431. (c) Hawley, G. N., editor, <u>Condensed Chemical Dictionary</u> , 9th Edition, 1977, Van Nostrand Reinhold, NYC. (d) Bretherick, L., <u>Handbook of Reactive Chemical Hazards</u> , 2nd Edition, 1979, Butterworths, Boston.		

**K. ADDITIONAL INFORMATION**

<p>This product is not for food or drug use.</p>
--

RECEIVED  
UNIVERSITY OF CALIFORNIA  
APR 3 9 28 AM '80

While Columbus Chemical Industries, Inc. believes that the data contained herein are factual, they are not to be taken as a warranty or representation for which Columbus Chemical Industries, Inc. assumes legal responsibility. They are offered solely for your consideration, investigation. Any use of these data and information must be determined by the user to be in accordance with the applicable Federal, State, and Local laws and regulations.