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**Material Safety Data Sheet:
Dihydrate Calcium Chloride Flake 77 - 80%**

AMBAR Chemical Inc.
1501 Main Street
Manistee, MI 49660
(616) 723-6266

DATE: March 18, 1998
Emergency Telephone Call CHEMTREC (800) 424-9300

SECTION I: PRODUCT INFORMATION

PRODUCT NAME:	Dihydrate Calcium Chloride Flake 77% - 80%
SHIPPING NAME:	Not Regulated
HAZARD CLASS:	Not Classified
D.O.T. WARNING LABEL:	None Required
INGREDIENTS:	
Calcium Chloride (77% - 80%)	CAS #: 010043-52-4
Potassium Chloride (2% - 3%)	CAS #: 007447-40-7
Sodium Chloride Max 1% - 2%	CAS #: 007647-14-5
Water (Balance) 15% - 20%	CAS #: 007732-18-5
Other Alkali Chlorides 1%	
CHEMICAL DESCRIPTION	Inorganic Salt Solution

SECTION II: HAZARDOUS INGREDIENTS

No Hazardous Ingredients

SECTION III: PHYSICAL DATA

SOLUBILITY IN WATER:	Very Soluble
SPECIFIC GRAVITY:	1.85
ODOR:	Odorless
APPEARANCE:	White to off-white solid flakes

SECTION IV: FIRE AND EXPLOSION HAZARD DATA

FLASH POINT:	Not Applicable
FLAMMABLE LIMITS:	Not Applicable
EXTINGUISHING MEDIA:	Non-Combustible
FIRE & EXPLOSION HAZARDS:	None
FIRE FIGHTING EQUIPMENT:	Positive pressure, self-contained breathing apparatus

SECTION V: REACTIVITY DATA

STABILITY:	Stable
INCOMPATIBILITY:	Metals will slowly corrode. Aluminum (and its alloys) and yellow brass will be attacked
HAZARDOUS DECOMPOSITION PRODUCTS:	None
HAZARDOUS POLYMERIZATION:	Will not occur



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SECTION VI: SPECIAL PROTECTION INFORMATION

VENTILATION: Provide general and/or local exhaust ventilation to control airborne levels below the exposure guidelines.

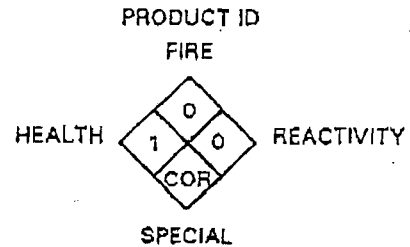
RESPIRATORY PROTECTION: If required, use an approved air purifying respirator.

SKIN PROTECTION: Clean coveralls, rubber gloves, boots and an apron depending upon extent of exposure possible. Remove contaminated clothing immediately, wash skin area with soap and water, and launder clothing before reuse.

EYE PROTECTION: Safety goggles. Face shield and chemical goggles for extensive exposure. Eye fountain near work area.

NFPA HAZARD RATINGS

- 4-Extreme
- 3-High
- 2-Moderate
- 1-Slight
- 0-Insignificant



HMIS HAZARD INDEX

- | | |
|----------------|------------|
| Hazardous | 4-Severe |
| Materials | 3-Serious |
| Identification | 2-Moderate |
| System | 1-Slight |
| | 0-Minimal |

HMIS Ratings

- | | |
|-----------------------------|--------------|
| Health | 1 |
| Flammability | 0 |
| Reactivity | 0 |
| Personal Protection | H/with boots |
| (See Below for Explanation) | |

Letter Designations of Personal Protective Equipment

- | | |
|---|---|
| Safety Glasses | A |
| Safety Glasses, Gloves | B |
| Safety Glasses, Gloves, Synthetic Aprons | C |
| Face Shield, Gloves, Synthetic Apron | D |
| Safety Glasses, Gloves, Dust Resp. | E |
| Safety Glasses, Gloves, Syn. Apron, Dust Resp. | F |
| Safety Glasses, Gloves, Vapor Resp. | G |
| Splash Goggles, Gloves, Syn. Apron, Vapor Resp. | H |
| Safety Glasses, Gloves, Combo Dust and Vapor Resp. | I |
| Splash Goggles, Gloves, Synthetic Apron, Combo Dust and V Resp. | J |
| Airline Hood or Mask, Gloves, Full Protective Suit, Boots | K |
| Situations Requiring Specialized Handling | X |



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SECTION VII: HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE: Airborne limit is 10 mg/cu.m
EYE: May cause moderate to severe eye irritation with corneal injury, which may be slow to heal.
SKIN CONTACT: Short, single exposure not likely to cause significant skin irritation. Prolonged or repeated exposure may cause skin irritation, even a burn. May cause more severe response if confined to skin or skin is abraded.
SKIN ABSORPTION: A single, prolonged exposure is not likely to result in material being absorbed through skin in harmful amounts. The LD50 for skin absorption in rabbits is >5,000 mg/kg for calcium chloride.
INGESTION: Single dose, oral toxicity is believed to be low. The oral LD50 for calcium chloride in rats is 1-2g/kg. Ingestion may cause gastrointestinal irritation and ulceration.
INHALATION: Vapors are unlikely due to physical properties. Mists may cause irritation to upper respiratory tract.
SYSTEMIC & OTHER EFFECTS: Results of in vitro mutagenicity tests have been negative for calcium chloride.

FIRST AID

EYES: Promptly flush eyes with water for at least 15 minutes. Call a physician.
SKIN: Rinse thoroughly with water for at least 15 minutes. Remove contaminated clothing, wash before reuse. Call a physician if irritation persists.
INGESTION: If swallowed, seek medical attention. Do not induce vomiting unless directed to do so by medical personnel.
NOTE TO PHYSICIAN: May cause corneal injury or burn. Treat skin irritation as any contact dermatitis. Treat burn as any thermal burn.

SECTION VIII: SPILL & LEAK PROCEDURES

REQUIRED ACTION: Flush area with large amount of water.
DISPOSAL METHOD: Dispose of according to Federal, State, and local regulations. Keep out of drinking water sources.
DECONTAMINATION PROCEDURE: Not appropriate.

SECTION IX: ADDITIONAL INFORMATION

Special precautions to be taken in handling and storage:
Avoid eye and prolonged skin contact. Always use cool water (temperature less than 80°F, 27°C) when diluting calcium chloride solution. Considerable heat is generated during mixing. Leather clothing and shoes will be damaged by calcium chloride.

Individuals handling this product should be informed of the recommended safety precautions and should have access to this information. This information herein is given in good faith, but no warranty of any kind is expressed or implied. Consult AMBAR Chemical Inc. for further information.

This MSDS meets the requirements specified in 29CFR 1910.1200. Customers are responsible for compliance with local, state and federal regulations that may be pertinent in the storage, application and disposal of this product.