

PRODUCT SPECIFICATION AND MATERIAL SAFETY DATA SHEET

CALCIUM CHLORIDE ICE MELTING COMPOUND

FORMULA	DESCRIPTION	GRADE ("IM")
CaCl ₂	White, Granular Solid	Technical

CHEMICAL ANALYSIS

<u>Typical</u>	<u>Specification</u>	
Calcium Chloride (CaCl ₂)	% 94 MIN	94.0
Alkali Chlorides (as NaCl)	% 5 MAX	4.0
Magnesium (as MgCl ₂)	% 0.02 MAX	0.01
Other impurities (except moisture)	% 0.20 MAX	
0.10		

PHYSICAL PROPERTIES

Molecular Weight	110.99
Loose Bulk Density (lb/ft ³)	42-46
Tapped Bulk Density (lb/ft ³)	51-55

SCREEN ANALYSIS

<u>Typical</u>	<u>Thru %</u>
U.S. Std. 6	92
U.S. Std. 12	12
U.S. Std. 20	1

PACKING

10, 25, 40, 50, 80 lb polyethylene bags
100 lb drums 2000 lb totebags

* polyethylene bags on pallets, cardboard box, shrinkwrapped

PHYSICAL DATA

Appearance and Odor:	White, Odorless Prills
Melting Point:	772° C
Boiling Point:	160° C
Vapor Pressure:	N.A.
Sol. in Water:	Very Soluble

Sp. Gravity:	2.2
% Volatile by Vol:	Non Volatile but Absorbs Moisture

FIRE AND EXPLOSION INFORMATION

Flash Point:	Not Applicable
Flammable Limits:	LFL and UFL - Not Applicable
Extinguishing Media:	Non-Combustible
Spec. Fire Fighting Equip:	None
Fire Hazards:	None

HEALTH HAZARD DATA

Eye:	Severe irritation and moderate corneal injury.
Skin Contact:	Strong solutions or solids on moist skin may cause marked irritation, even burn. Mild irritation on dry skin.
Skin Absorption:	Not considered absorbable through the skin in toxic amounts.
Ingestion:	Low toxicity in single dose.
Inhalation:	Low toxicity. A concentration of 10 MG/M3 in breathable air has been suggested.

FIRST AID--IN ALL CASES CONSULT MEDICAL PERSONNEL

Eyes:	Immediately irrigate with flowing water continuously for fifteen minutes.
Skin:	Immediately flush skin with abundant water for at least fifteen minutes and remove contaminated clothes. Wash clothes before reuse. Destroy contaminated shoes. Consult a physician if irritation persists.
Ingestion:	Induce vomiting immediately by giving two glasses of water and sticking a finger down the throat. Call a physician.
Inhalation:	Remove to fresh air if ill effects occur. Consult medical personnel.

NOTES OF MEDICAL IMPORTANCE

Eyes:	Stain for evidence of corneal injury. If so, instill antibiotic steroid preparation frequently. Consult ophthalmologist.
Skin:	Treat as normal contact dermatitis. In case of burn, treat as thermal burn. Not considered absorbable in toxic amounts.
Respiratory:	May cause irritation.
Oral:	Low toxicity.
OTHER NOTES: <i>No specific antidote or treatment is used. Treatment based on judgement of physician. On the particular case consult standard literature.</i>	

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REACTIVITY DATA

Hazardous Polymerization:	Does not occur.
Stability:	Hazardous Descomposition
Products:	
Incompatibility:	Metals corrode slowly in aqueous calcium chloride solutions. Aluminum and alloys and yellow brass will be attacked.
Other:	Highly hygroscopic (absorbs moisture) gives off heat while dissolving.

SPILL OR LEAK PROCEDURES

Action to take after spills:	No special action.
Disposal Method:	Wash away with water in excess. It may be buried. Keep away from drinking water sources. Observe local, state and federal regulations.
Precautions:	Spills should be swept up, returned to container or discarded. Because moisture is retained by spilled material, walking surfaces remain wet longer.

PROTECTIVE EQUIPMENT TO BE USED

Eye Protection:	Eye fountain near work area. Normally safety glasses without side shields may be used. For severe exposure, use chemical workers goggles.
Respiratory Protection:	Approved dust respirator if needed.
Protective Clothing:	The body should be well covered by clean clothing. Depending upon the possible exposure, gloves, boots, and apron are recommended. Leather is damaged by calcium chloride.

SPECIAL PRECAUTIONS OR COMMENTS

Precautions:	Eye contact should be avoided, also prolonged skin contact. Very high heat is developed when dissolving calcium chloride. Always use water at less than 27 degree C. temperature. Calcium chloride picks up moisture and forms a solution when exposure to the atmosphere.
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CaCl₂ -- CAS # 010043-52-4

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