

Ward Chemical Inc.
6015 - 103A ST.
EDMONTON AB, CANADA T6H 2J7
Ph(780)436-4832 Fax(780)436-3780
www.wardchem.com

CALCIUM CHLORIDE BRINE

**“V Grade 1310
Low Iron**

TYPICAL SPECIFICATIONS

CALCIUM CHLORIDE	27.0 – 28.0%
MAGNESIUM CHLORIDE	3.0%
SODIUM CHLORIDE	2.0%
POTASSIUM CHLORIDE	1.0%
FE	+/- 2 ppm
ph.	7.0 - 8.0
Density	1.31 kilograms per liter 11.0 lbs/usg
FREEZE POINT	-45 DEG C.

NON REGULATED.

WARD CHEMICAL INC. W1.31 LOW IRON.txt
CALCIUM CHLORIDE SOLUTION
MATERIAL SAFETY DATA SHEET
Tcadd: ~~W 1.31~~ W 1.31 CALCIUM CHLORIDE Brine

General Information

Name: WARD CHEMICAL INC.
Street: 6015 - 103A STREET
City: EDMONTON
Province: Alberta
Country: Canada
Postal Code: T6H 2J7
Emerg Ph #: 780-940-1133
Info Ph #: 780-436-4832
Date MSDS Prepared: 04MAR02
Safety Data Review Date: 15Mar12

Ingredients/Identity Information

Ingredient: CALCIUM CHLORIDE
Percent: 27-28
NIOSH (RTECS) Number: EV9800000
CAS Number: 10043-52-4
OSHA PEL: NOT APPLICABLE
ACGIH TLV: NOT APPLICABLE
Other Recommended Limit: 10 MG/M3 (MFR)

Ingredient: Magnesium Chloride
Percent: 3%
NIOSH (RTECS) Number: TS8050000
CAS Number: 7447-40-7
OSHA PEL: NOT APPLICABLE
ACGIH TLV: NOT APPLICABLE

Ingredients: Sodium Chloride/ Potassium Chloride
Percent: 3-4
NIOSH (RTECS) Number: VZ4725000
CAS Number: 7647-14-5
OSHA PEL: NOT APPLICABLE
ACGIH TLV: NOT APPLICABLE

Ingredient: WATER
Percent: 64-66
NIOSH (RTECS) Number: ZC0110000
CAS Number: 7732-18-5
OSHA PEL: NOT APPLICABLE
ACGIH TLV: NOT APPLICABLE

Physical/Chemical Characteristics

Appearance And Odor: CLEAR LIQUID BRINE SOLUTION
Boiling Point: 230F, 160C
Vapor Pressure (MM Hg/70 F): SAME/H2*O
Vapor Density (Air=1): 7-15@25C
Specific Gravity: 1.32(20 C)
Solubility In Water: COMPLETELY MISCIBLE

Fire and Explosion Hazard Data

Flash Point: NOT APPLICABLE
Lower Explosive Limit: N/A
Upper Explosive Limit: N/A
Extinguishing Media: NON-COMBUSTIBLE

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Special Fire Fighting Proc: WEAR NIOSH/MSHA APPROVED POSITIVE PRESSURE SCBA.
Unusual Fire And Expl Hazrds: NONE SPECIFIED BY MANUFACTURER.

Reactivity Data

Stability: YES
Cond to Avoid (Stability): NONE SPECIFIED BY MANUFACTURER.
Materials to Avoid: METALS WILL SLOWLY CORR IN AQU SOLN. ALUMINUM(AND ITS ALLOYS) AND YELLOW BRASS AND STAINLESS STEEL WILL BE ATTACKED BY CALCIUM CHLORIDES
Hazardous Decomp Products: NOT APPLICABLE
Hazardous Poly Occur: NO
Conditions to Avoid (Poly): NONE SPECIFIED BY MANUFACTURER.

Health Hazard Data

LD50-LC50 Mixture: ORAL(RAT)900-2100MG/KG 100% CACIL2
Route Of Entry - Inhalation: YES
Route Of Entry - Skin: NO
Route Of Entry - Ingestion: NO
Health Haz Acute and Chronic: EYE:MOD/SEVERE EYE IRRIT W/CORNEAL INJURY MAY BE SLOW TO HEAL AT HIGH TEMPS, MATERIAL HAS MORE INTENSE EFTS AND THERMAL BURNS POSSIBLE. SKIN:RPTD EXPOSURE MAY CAUSE SKIN IRRIT, EVEN BURNS.MORE SEVERE RESPONSE IF CONFINED TO SKIN OR SKIN IS SCRATCHED/CUT.
INGEST: MAY CAUSE GI IRRIT OR ULCERATION. (SEE EFTS OF OVEREXP)
Carcinogenicity - NTP: NO
Carcinogenicity - IARC: NO
Carcinogenicity - OSHA: NO
Explanation Carcinogenicity: NOT RELEVANT
Signs/Symptoms Of Overexp: HEALTH HAZARDS: INHAL: MISTS MAY CAUSE IRRITATION TO UPPER RESPIRATORY TRACT.
Med Cond Aggravated By Exp: NONE SPECIFIED BY MANUFACTURER.
Emergency/First Aid Proc: EYES:IRRIGATE W/FLOWING WATER IMMED. AND CONT FOR 15 MIN. CONSULT MD. SKIN:WASH OFF IN FLOWING WATER OR SHOWER.
INGEST:INDUCE VOMIT IMMED, BY GIVING 2 GLASSES OF WATER AND STICKING FINGER DOWN THROAT. CALL MD.INHAL:REMOVE TO FRESH AIR.CONSULT MD. NOTE TO MD: IF BURN IS PRESENT, TREAT AS ANY THERMAL BURN. AFTER DECONTAM. NO SPECIFIC ANTIDOTE. SUPPORTIVE CARE. TREATMENT BASED ON JUDGMENT (SUPP DATA)

Precautions for safe handling and use

Steps If Mat'l Released/Spill: FLUSH AREA W/PLENTY OF WATER. WALKING SURFACES MAY REMAIN WET LONGER DUE TO MOISTURE BEING HELD BY SPILLED MATERIAL.
Neutralizing Agent: NONE SPECIFIED BY MANUFACTURER.
Waste Disposal Method: WASH AWAY WITH LARGE EXCESS OF WATER. KEEP OUT OF DRINKING WATER SOURCES. COMPLY WITH LOCAL, STATE, AND FEDERAL REGULATIONS
Precautions-Handling/Storing: MAY SOMETIMES BE SHIPPED HOT, WHICH MAY CAUSE THERMAL BURNS & INTENSE CHEM IRRIT OR BURN. AVOID EYE & PROLONGED SKIN CONTACT.
Other Precautions: ALWAYS USE COOL WATER (TEMP <80F) WHEN DILUTING CALCIUM CHLORIDE SOLUTION. HEAT DEVELOPED BY SOLUTIONS IS VERY HIGH DURING MIXING. LEATHER CLOTHING & SHOES WILL BE DAMAGED BY CALCIUM CHLORIDE.

Control Measures

Respiratory Protection: CONSULT LOCAL/SAFETY HEALTH AUTHORITIES IF ADDITIONAL GUIDANCE IS NECESSARY. THERE IS NO OSHA PEL OR ACGIH TLV FOR CALCIUM CHLORIDE.
Ventilation: GENERAL AND/OR LOCAL EXHAUST TO CONTROL AIRBORNE LEVELS BELOW EXPOSURE GUIDLINES.
Protective gloves: IMPERVIOUS GLOVES AS REQUIRED (FP N).
Eye Protection: CHEM GOGGLES/EYE WASH FOUNT IN IMMED AREA

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Other Protective Equipment: USE PROTECTIVE CLOTHING IMPERVIOUS TO THIS MATERIAL; GLOVES, BOOTS, APRON OR FULL-BODY SUIT WILL DEPEND ON OPERATION. Work Hygienic Practices: IF SKIN COMES IN CONTACT W/CONTAIN CLOTHING. REMOVE CLOTHING IMMED, WASH SKIN AREA W/ SOAP & WATER, LAUNDRER CLOTHING. Suppl. Safety & Health Data: FIRST AID PROC: NOTE TO PHYSICIAN: SUPPORTIVE CARE. TREATMENT BASED ON JUDGMENT OF THE PHYSICIAN IN RESPONSE TO REACTIONS OF THE PATIENT.

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Transportation Data
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DOT Proper Shipping Name: NOT REGULATED BY THIS MODE OF TRANSPORTATION
IMO Proper Shipping Name: NOT REGULATED FOR THIS MODE OF TRANSPORTATION
IATA Proper Shipping Name: NOT REGULATED BY THIS MODE OF TRANSPORTATION
AFI Prop. Shipping Name: NOT REGULATED BY THIS MODE OF TRANSPORTATION
Additional Trans Data: NOT REGULATED FOR TRANSPORTATION

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Disposal Data
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Disposal must comply with local environmental regulations.

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Label Data
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Label Required: NO
Technical Review Date: 15Mar12
Common Name: CALCIUM CHLORIDE BRINE SOLUTION
Acute Health Hazard-Sight: X
Contact Hazard-Severe: X
Fire Hazard-None: X
Reactivity Hazard-None: X
Special Hazard Precautions: ACUTE:AVOID EYE AND PROLONGED SKIN CONTACT.
CAUSES SKIN BURNS. DO NOT GET ON SKIN AND CLOTHING. AVOID BREATHING MIST.
KEEP CONTAINER CLOSED. USE WITH ADEQUATE VENTILATION. WASH THOROUGHLY AFTER
HANDLING. MAY CAUSE RESPIRATORY TRACT IRRITATION.DO NOT INGEST. MAY CAUSE
IRRITATION/ULERATION.CHRONIC: HAZARDS NOT DETERMINED.
Protect Eye: Y
Protect Skin: Y