

# Material Safety Data Sheet

Issuing Date 20-Feb-2009

Revision Date

Revision Number 0

## 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Name** Calcium Chloride Well Brine

**Recommended Use** Ice Control Dust Control

### Supplier Address

Chloride Holdings L.L.C.  
14910 Downey Road  
Capac, MI 48014  
TEL: 810-395-8600

**Company Emergency Phone Number** 810-342-9313

## 2. HAZARDS IDENTIFICATION

### WARNING!

#### Emergency Overview

Irritating to eyes  
Risk of serious damage to eyes  
Irritating to skin  
May cause irritation of respiratory tract

**Appearance** Clear to yellow

**Physical State** Liquid.

**Odor** None

### Potential Health Effects

#### Principle Routes of Exposure

Inhalation. Skin contact. Eye contact.

#### Acute Toxicity

##### Eyes

Irritating to eyes. Risk of serious damage to eyes. May cause burns.

##### Skin

Irritating to skin. Prolonged skin contact may cause burns

##### Inhalation

May cause irritation of respiratory tract.

##### Ingestion

May be harmful if swallowed.

#### Chronic Effects

No known effect.

#### Aggravated Medical Conditions

Pre-existing eye disorders. Skin disorders.

#### Environmental Hazard

See Section 12 for additional Ecological Information.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No	Weight %
Calcium chloride	10043-52-4	15-40
Magnesium chloride	7786-30-3	3-7
Sodium chloride	7647-14-5	3-7
Potassium Chloride	7447-40-7	1-5

**4. FIRST AID MEASURES**

<b>Eye Contact</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If symptoms persist, call a physician.
<b>Skin Contact</b>	Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists, call a physician.
<b>Inhalation</b>	Move to fresh air.
<b>Ingestion</b>	Clean mouth with water and afterwards drink plenty of water. Do NOT induce vomiting. Consult a physician.
<b>Notes to Physician</b>	Treat symptomatically.

**5. FIRE-FIGHTING MEASURES**

<b>Flammable Properties</b>	Not flammable.			
<b>Flash Point</b>	Not applicable.			
<b>Suitable Extinguishing Media</b>	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.			
<b>Hazardous Combustion Products</b>	Hydrogen chloride. Magnesium oxides			
<b>Explosion Data</b>				
<b>Sensitivity to Mechanical Impact</b>	None.			
<b>Sensitivity to Static Discharge</b>	None			
<b>Protective Equipment and Precautions for Firefighters</b>	As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.			
<b>NFPA</b>	<b>Health Hazard 1</b>	<b>Flammability 0</b>	<b>Instability 0</b>	<b>Physical and Chemical Hazards -</b>
<b>HMIS</b>	<b>Health Hazard 2</b>	<b>Flammability 0</b>	<b>Physical Hazard 0</b>	<b>Personal Protection -</b>

**6. ACCIDENTAL RELEASE MEASURES**

<b>Personal Precautions</b>	Avoid contact with skin, eyes and clothing. Use personal protective equipment. Ensure adequate ventilation.
<b>Environmental Precautions</b>	Prevent product from entering drains. Do not flush into surface water or sanitary sewer system. Refer to protective measures listed in Sections 7 and 8.
<b>Methods for Containment</b>	Prevent further leakage or spillage if safe to do so.
<b>Methods for Cleaning Up</b>	Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Take up mechanically and collect in suitable container for disposal.

**7. HANDLING AND STORAGE**

<b>Handling</b>	Handle in accordance with good industrial hygiene and safety practice. Wear personal protective equipment. Avoid contact with skin and eyes. Avoid breathing vapors or mists.
<b>Storage</b>	Keep in a dry, cool and well-ventilated place.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

<b>Exposure Guidelines</b>	This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.
<b>Engineering Measures</b>	Showers Eyewash stations Ventilation systems
<b>Personal Protective Equipment</b>	
<b>Eye/Face Protection</b>	Tightly fitting safety goggles. If splashes are likely to occur, wear: Face-shield.
<b>Skin and Body Protection</b>	Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.
<b>Respiratory Protection</b>	None required under normal usage. In case of mist, spray or aerosol exposure wear suitable personal respiratory protection and protective suit
<b>Hygiene Measures</b>	Handle in accordance with good industrial hygiene and safety practice.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance</b>	Clear to yellow.	<b>Odor</b>	None.
<b>Odor Threshold</b>	Not applicable	<b>Physical State</b>	Liquid
<b>pH</b>	No information available.	<b>Autoignition Temperature</b>	Not applicable
<b>Flash Point</b>	Not applicable.	<b>Boiling Point/Range</b>	230°C
<b>Decomposition Temperature</b>	Not applicable	<b>Explosion Limits</b>	Not applicable
<b>Melting Point/Range</b>	Not applicable	<b>Specific Gravity</b>	@ 60°F
<b>Flammability Limits in Air</b>	Not applicable	<b>Solubility</b>	Soluble in water.
<b>Specific Gravity</b>	1.289	<b>Vapor Pressure</b>	No data available
<b>Water Solubility</b>	Completely soluble		
<b>Evaporation Rate</b>	No information available		
<b>Vapor Density</b>	No data available		

## 10. STABILITY AND REACTIVITY

<b>Stability</b>	Stable.
<b>Incompatible Products</b>	Strong oxidizing agents, strong acids, and strong bases Contact with metals (aluminum, zinc, tin) may release hydrogen gas.
<b>Conditions to Avoid</b>	None known.
<b>Hazardous Decomposition Products</b>	None known.
<b>Hazardous Polymerization</b>	Hazardous polymerization does not occur.

## 11. TOXICOLOGICAL INFORMATION

### Acute Toxicity

**Product Information** No acute toxicity information is available for this product.

**Eye Contact** Irritating to eyes. May cause burns.

**Skin Contact** Irritating to skin. Prolonged skin contact may cause burns

### Component Information

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Potassium Chloride	2600 mg/kg ( Rat )		
Calcium chloride	1000 mg/kg ( Rat )	2630 mg/kg ( Rat )	
Magnesium chloride	2800 mg/kg ( Rat )		
Sodium chloride	3 g/kg ( Rat )	10 g/kg ( Rabbit )	42 g/m <sup>3</sup> ( Rat ) 1 h

### Chronic Toxicity

**Chronic Toxicity** No known effect.

**Target Organ Effects** Eyes. Skin.

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

The environmental impact of this product has not been fully investigated.

Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Calcium chloride		LC50: 10850 mg/L Lepomis macrochirus 96 h static		EC50: 52 mg/L Daphnia magna 48 h
Magnesium chloride	EC50: 2200 mg/L Desmodesmus subspicatus 72 h	LC50: 4210 mg/L Gambusia affinis 96 h static LC50: 1970-3880 mg/L Pimephales promelas 96 h static	EC50 = 26140 mg/L 1 h EC50 = 36300 mg/L 30 min EC50 = 77200 mg/L 24 h	EC50: 1400 mg/L Daphnia magna 24 h EC50: 140 mg/L Daphnia magna 48 h Static
Sodium chloride		LC50: 5560-6080 mg/L Lepomis macrochirus 96 h flow-through LC50: 12946 mg/L Lepomis macrochirus 96 h static LC50: 6020-7070 mg/L Pimephales promelas 96 h static LC50: 7050 mg/L Pimephales promelas 96 h semi-static LC50: 6420-6700 mg/L Pimephales promelas 96 h static LC50: 4747-7824 mg/L Oncorhynchus mykiss 96 h flow-through		EC50: 1000 mg/L Daphnia magna 48 h EC50: 340.7 - 469.2 mg/L Daphnia magna 48 h Static

### 13. DISPOSAL CONSIDERATIONS

<b>Waste Disposal Methods</b>	This material, as supplied, is not a hazardous waste according to Federal regulations (40 CFR 261). This material could become a hazardous waste if it is mixed with or otherwise comes in contact with a hazardous waste, if chemical additions are made to this material, or if the material is processed or otherwise altered. Consult 40 CFR 261 to determine whether the altered material is a hazardous waste. Consult the appropriate state, regional, or local regulations for additional requirements.
<b>Contaminated Packaging</b>	Dispose of in accordance with local regulations.

### 14. TRANSPORT INFORMATION

<u>DOT</u>	Not regulated.
<u>TDG</u>	Not regulated.
<u>MEX</u>	Not regulated.
<u>ICAO</u>	Not regulated.
<u>IATA</u>	Not regulated.
<u>IMDG/IMO</u>	Not regulated.
<u>RID</u>	Not regulated.
<u>ADR</u>	Not regulated.
<u>ADN</u>	Not regulated.

### 15. REGULATORY INFORMATION

#### International Inventories

TSCA	Complies
DSL	Complies
NDSL	Complies
EINECS	Complies
ELINCS	Complies
ENCS	Complies
IECSC	Complies
KECL	Complies
PICCS	Complies
AICS	Complies

#### Legend

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory  
 DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

#### U.S. Federal Regulations

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

#### SARA 311/312 Hazard Categories Acute Health Hazard

Yes

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Chronic Health Hazard	No
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

**Clean Water Act**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

**CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

**U.S. State Regulations****California Proposition 65**

This product does not contain any Proposition 65 chemicals.

**U.S. State Right-to-Know Regulations****International Regulations****Canada**

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

**WHMIS Hazard Class**

D2B Toxic materials

**16. OTHER INFORMATION**

Prepared By	Product Stewardship 23 British American Blvd. Latham, NY 12110 1-800-572-6501
Issuing Date	20-Feb-2009
Revision Date	
Revision Note	No information available

**General Disclaimer**

The information provided on this MSDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of Safety Data Sheet