



# Product Data Sheet (MSDS/SDS)

## Calcium Chloride (Liquid)

### Product Identifier and Company Identification

Product name : Calcium Chloride, Liquid NSF  
HBCC SDS number : CC06000  
Synonym : Calcium Chloride-Liquid  
Product use and Restrictions : Refer to label or call

### Hazard Identification

Classification : Serious Eye Damage/Eye Irritation – Category 2A  
Signal Word : WARNING  
Pictogram(s) :



Hazard Statements H319: Causes serious eye irritation.

### Precautionary Statements

Response : P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P337+P313: If eye irritation persists: Get medical attention.

Prevention: :P280: Wear eye or face protection.  
P264: Wash hands thoroughly after handling.

Storage : N/A  
Disposal : N/A

### Composition/Information on Ingredients

CAS Number	Ingredient Name	Weight %
10043-52-4	Calcium Chloride	26-38%
7732-18-5	Water	62-73%
N/A	Alkali Chlorides	<6%

## First Aid Measures

Ingestion	: If swallowed will cause nausea and vomiting. If victim is conscious, have victim drink water. If victim is unconscious or having convulsions, do nothing except keep victim warm GET MEDICAL ATTENTION.
Inhalation	: Move to fresh air; if breathing is difficult or discomfort persists, GET MEDICAL ATTENTION.
Skin	: If necessary, remove contaminated clothing and shoes. Flush affected areas with plenty of water for at least 15 minutes.
Eyes	: Promptly flood with water and continue washing for at least 15 minutes. Consult an ophthalmologist.
Medical Conditions	: N/A
Effects of Overexposure	: N/A
Summary of Acute Health Hazards	: N/A
Ingestion	: May irritate gastrointestinal tract and cause nausea and vomiting.
Inhalation	: Causes irritation of nose and throat. Additional effects may include shortness of breath.
Skin	: Causes mild irritation. May cause more severe response if skin is abraded (scratched or cut). Additional effects may include blisters or sores.
Eyes	: Causes irritation and possible transient corneal injury. Tearing may occur.
Note to Physicians	: If burn is present, treat as any thermal burn, after decontamination. No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.
Summary of Chronic Health	: May cause perforation of the nasal septum and nosebleeds. Contact with heated product can cause thermal burns with resultant corneal injury.

## Fire Fighting Measures

Extinguishing	: This product is non-flammable.
Special Exposure Hazards	: Avoid breathing corrosive vapors; keep upwind.
Special Protective Equipment for Firefighters	: Wear positive-pressure self-contained breathing apparatus (SCBA) and protective fire-fighting clothing (includes fire-fighting helmet, coat, trousers, boots, and gloves).
Fire Fighting Procedures	: N/A
NFPA Rating	: Health - 1 Flammability - 0 Instability - 0



Uniform Fire Code Rating : 0=Insignificant 1=Slight 2=Moderate 3=High 4=Extreme  
: N/A

**Accidental Release Measures:**

Personal Precautions : Keep authorized personnel from entering the area.  
Spilled material may cause a slipping hazard.

Emergency Procedures : Isolate area.

Methods of Containment : Dike the spilled liquid, and either pump back into  
And Clean-Up original container or cover with sand or clay-type  
substance for absorption.

**Handling and Storage**

Safe Handling : Store at ambient temperature. Eye wash and safety  
shower should be provided within the immediate work  
area for emergency use. Launder contaminated clothing  
before re-use. Prevent possible eye and skin contact by  
wearing protective clothing and equipment.

Storage : Protect from atmospheric moisture.

Work/Hygienic Practices : Avoid contact with the eyes, skin, and mucous  
membranes. Wash hands thoroughly with soap and  
water before eating, drinking, smoking or using toilet  
facilities. Do NOT place food, coffee or other drinks in  
the area where dusting or splashing of solutions is  
possible.

Ventilation : Use local exhaust in enclosed areas. Natural ventilation  
for outdoor areas.

**Exposure Controls/Personal Protection**

Occupational Exposure Limits :

Chemical Name: Calcium Chloride, Liquid				
Exposure Limits (TWAs) in Air				
CAS Number	IDLH	ACGIH TLV	OSHA PEL	STEL
10043-52-4	N/A	N/A	N/A	N/A

Occupational Exposure Limits : Employees should be provided with and use impervious  
clothing, rubber gloves, and rubber boots. Leather work  
boots and/or leather products will dehydrate with  
resultant shrinkage and possible destruction.

Eye Protection : Employees should be provided with and required to use  
splash-proof safety goggles and splash shields where  
there is any possibility of calcium chloride contacting the  
eyes.

Respiratory Protection : Respiratory protection should be worn when there is a  
potential to exceed the exposure limit requirements or  
guidelines. If there are no applicable exposure limit  
requirements or guidelines, wear respiratory protection

as indicated by your risk assessment process. In misty atmospheres, use an approved particulate respirator.

### Physical and Chemical Properties

<b>Appearance:</b> Clear to straw colored liquid	<b>Odor:</b> Odorless
<b>Odor Threshold:</b> N/A	<b>pH:</b> 8-9.5 @ 5% solution
<b>Melting Point/Freezing Point:</b> 51oC @29.6% CaCl <sub>2</sub> ; 9°C @ 38% CaCl <sub>2</sub>	<b>Initial Boiling Point/Range:</b> 118°C (244°F) for 38% Solution; 115°C for 34.7% Solution
<b>Flash Point:</b> Non-Flammable	<b>Evaporation Rate (BuAc=1):</b> N/A
<b>Flammability:</b> N/A	<b>Lower/Upper Explosive Limit:</b> N/A
<b>Vapor Pressure (mmHg):</b> 9-16@ 25°C	<b>Vapor Density (Air=1):</b> N/A
<b>Relative Density:</b> N/A	<b>Solubility in Water:</b> 100%
<b>Partition Coefficient:</b> N/A	<b>Autoignition Temperature:</b> Non-Flammable
<b>Decomposition Temperature:</b> N/A	<b>Viscosity:</b> N/A
<b>% Volatiles:</b> 73-62%	<b>Specific Gravity (Water=1):</b> 1.26 @ 77°F 1.39@77°F
<b>Molecular Weight:</b> 110.99 (for pure CaCl <sub>2</sub> )	<b>VOC:</b> N/A

### Stability and Reactivity

Reactivity : N/A  
 Chemical Stability : Stable  
 Possibility of Hazardous Reactions or Polymerizations : Hazardous polymerization will not occur  
 Conditions to Avoid : N/A  
 Incompatible Materials : Boric acid and calcium oxide are incompatible.  
 Hazardous Decomposition Products : If liquid completely dries from fire, thermal decomposition products may include toxic and corrosive fumes of chlorine and hydrogen chloride. Product may react with some metals (aluminum, zinc, tin, etc.) to release flammable hydrogen gas.

### Toxicological Information

Acute and Chronic Effects : See Section 4  
 Routes of Exposure :  
     Ingestion : Yes  
     Inhalation : No  
     Skin : Yes  
     Eyes : Yes  
 Symptoms related to Physical, Chemical & Toxicological Characteristics : N/A  
 Numerical Measures of Toxicity : Toxicity Data (anhydrous calcium chloride):  
     TDLO: 112 g/kg, oral, 20 weeks, rat LDLO: 274 mg/kg, oral, rat  
     LD50: 1000 mg/kg, oral, rat  
     LD50: 264 mg/kg, intraperitoneal, rat  
     Moderately toxic by ingestion, slightly toxic by dermal absorption.  
 Chronic Toxicity : N/A

Carcinogenicity :

Product Name: Calcium Chloride, Liquid					
ACGIH	IARC	EPA	NIOSH	NTP	OSHA
No	No	No	No	No	No

TARGET ORGANS : N/A

### Ecological Information

Ecotoxicity : N/A  
Persistence and Degradability : N/A  
Bioaccumulative Potential :

Product/Ingredient	Log $P_{ow}$	BCF	Potential
-	-	-	-

Mobility in Soil : N/A

### Disposal Considerations

Disposal of Container : Dispose of in accordance with local, state and federal regulations.

### Transport Information

This product is not regulated as a hazardous material, substance or dangerous good

### Regulatory Information

SARA 302 Extremely Hazardous Substances (EHS) : No chemical in this product is listed as an Extremely Hazardous Substance (EHS) under Section 302 of EPCRA.

SARA 304 Extremely Hazardous Substances (EHS) Release Notification : No chemical in this product is listed as an Extremely Hazardous Substance (EHS) which, if released to the environment in quantities at or above the substance's Reportable Quantity (RQ), would require reporting to the SERC and LEPC under Section 304 of EPCRA.

SARA 313 Reportable Chemicals : No chemical in this product is subject to annual emissions, transfers, or waste management reporting under the Community-Right-to-Know provisions of EPCRA Section 313, also known as the Toxic Release Inventory (TRI) Report or Form R.

CERCLA Hazardous Substances : No chemical in this product is listed as a CERCLA hazardous substance subject to the National Response Center (NRC) release reporting requirements.

Clean Air Act (CAA) Section 112(r) Air Pollutants	: No chemical in this product is listed as an air pollutant under the U.S. Clean Air Act, Section 112(r) (40 CFR 61).
California Prop 65 Chemicals	: This product does not contain any chemicals known to the state of California to cause cancer and birth defects or other reproductive harm.
Hazard Label Warning	: This product does not require hazard label warnings.
TSCA (Toxic Substances Control Act)	: All chemical substances in this product are listed on the U.S. TSCA Inventory List.

## ACRONYMS

CAS # – Chemical Abstract Services Registry Number  
 CFR – Code of Federal Regulations  
 CERCLA – Comprehensive Environmental Response, Compensation, and Liability Act  
 EPCRA – Emergency Planning and Community Right-to-Know Act  
 LEPC – Local Emergency Planning Committee  
 SERC – State Emergency Response Commission



Maximum use level under NSF/ANSI Standard 60  
 Liquid Calcium Chloride 30-38%                      Maximum use                      200 mg/L

## Other Information

Revision date	: 01/18/2018
Supersedes	: 05/01/2015
First Issue	: 12/01/1985
Chemical Family/Type	: Inorganic Salt
Section(s) changed since last revision	: Section 15

**IMPORTANT!** Read this SDS before use or disposal of this product. Pass along the information to employees and any other persons who could be exposed to the product to be sure that they are aware of the information before use or other exposure. This SDS has been prepared in accordance with the Globally Harmonized System of Chemical and Labeling of Chemicals (GHS) Fifth Edition and the OSHA Hazard Communication Standard [29 CFR 1910.1200]. The SDS information is based on sources believed to be reliable. Available data, safety standards, and government regulations are subject to change and the conditions of handling and use, or misuse are beyond our control; Lyman Dust Control Services of Montana, LLC makes no warranty, either expressed or implied, with respect to the completeness or continuing accuracy of the information contained herein and disclaims all liability for reliance thereon. Additional information may be necessary or helpful for specific conditions and circumstances of use. It is the user's responsibility to determine the suitability of this product and to evaluate risks and exercise appropriate precautions for protection of employees and others prior to use.