



Safety Data Sheet

1. Product Identifier and Company Identification

Product name : Calcium Chloride, Liquid; HB-98
HBCC SDS number : CC06000
Synonym : Calcium Chloride-Liquid
Product use and Restrictions : Refer to label or call
Manufacturer : Corporate Headquarters
Contact Address : Hill Brothers Chemical Company
1675 North Main Street
Orange, California 92867
714-998-8800
800-821-7234
Corporate Safety & Compliance
Hill Brothers Chemical Company
7121 West Bell Road, Suite 250
Glendale, Arizona 85308
623-535-9955 – Office
623-535-9944 – Fax

Emergency telephone Number (Chemtrec) : 800-424-9300
Website : <http://hillbrothers.com>

2. 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

3. Composition/Information on Ingredients

CAS Number	Ingredient Name	Weight %
10043-52-4	Calcium Chloride	27-38%
7732-18-5	Water	73-62%
N/A	Alkali Chlorides	<6%

4. 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.

5. 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



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

- Uniform Fire Code Rating** : N/A

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

7. 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.

8. Exposure Controls/Personal Protection

Occupational Exposure Limits

Chemical Name: Calcium Chloride, Liquid; HB-98				
Exposure Limits (TWAs) in Air				
CAS Number	IDLH	ACGIH TLV	OSHA PEL	STEL
10043-52-4	N/A	N/A	N/A	N/A

Protective Equipment

: 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.

9. Physical and Chemical Properties

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

10. 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.

11. 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; HB-98					
ACGIH	IARC	EPA	NIOSH	NTP	OSHA
No	No	No	No	No	No

TARGET ORGANS : N/A

12. Ecological Information

Ecotoxicity : N/A

Persistence and Degradability : N/A

Bioaccumulative Potential :

Product/Ingredient	Log _{pow}	BCF	Potential
-	-	-	-

Mobility in Soil : N/A

13. Disposal Considerations

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

14. Transport Information

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

15. 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 311/312 Hazards:

SARA 311/312 Hazards				
Acute	Chronic	Flammability	Pressure	Reactivity
No	No	No	No	No

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

16. Other Information

Revision date : 05/01/2015
Supersedes : 08/09/2010
First Issue : 12/01/1985
Chemical Family/Type : Inorganic Salt

Section(s) changed since last revision : MSDS to First Issue SDS Conversion

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; **Hill Brothers Chemical Company** 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.