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Material Safety Data Sheet Calcium Chloride Hexahydrate

ACC# 31639

Section 1 - Chemical Product and Company Identification

MSDS Name: Calcium Chloride Hexahydrate

Catalog Numbers: C78 500, C78-500, C78500

Synonyms: Calcium dichloride hexahydrate, Calcium dichloride

Company Identification:

Fisher Scientific

1 Reagent Lane

Fairlawn, NJ 07410

For information, call: 201-796-7100

Emergency Number: 201-796-7100

For CHEMTREC assistance, call: 800-424-9300

For International CHEMTREC assistance, call: 703-527-3887

Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name	Percent	EINECS/ELINCS
7774-34-7	Calcium Chloride Hexahydrate	100.0	unlisted

Hazard Symbols: Xi

Risk Phrases: 36

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Appearance: colourless. **Warning!** May cause skin irritation. Causes severe eye irritation. Causes digestive and respiratory tract irritation.

Target Organs: Heart.

Potential Health Effects

Eye: Contact with eyes may cause severe irritation, and possible eye burns.

Skin: Contact with skin causes irritation and possible burns, especially if the skin is wet or moist.

Ingestion: May cause severe gastrointestinal tract irritation with nausea, vomiting and possible burns. May cause cardiac disturbances. In very severe cases, may result in seizures, rapid respiration, slow heartbeat, or death.

Inhalation: May cause severe irritation of the upper respiratory tract with pain, burns, and inflammation.

Chronic: No information found.

Section 4 - First Aid Measures

Eyes: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower lids. Get medical aid immediately.

Skin: Get medical aid immediately. Immediately flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse.

Ingestion: Do NOT induce vomiting. If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid. Get medical aid immediately.

Inhalation: Get medical aid immediately. Remove from exposure to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid if cough or other symptoms appear.

Notes to Physician: Treat symptomatically and supportively.

Section 5 - Firefighting Measures

General Information: Wear appropriate protective clothing to prevent contact with skin and eyes. Wear a self-contained breathing apparatus (SCBA) to prevent contact with thermal decomposition products.

Extinguishing Media: Do NOT use water directly on fire. For small fires, use water spray, dry chemical, carbon dioxide or chemical foam. Use dry chemical, carbon dioxide, or alcohol-resistant foam.

Autoignition Temperature: Not available.

Flash Point: Not available.

NFPA Rating: Not published. Explosion Limits, Lower: Not available. Upper: Not available.

Section 6 - Accidental Release Measures

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks: Vacuum or sweep up material and place into a suitable disposal container. Avoid generating dusty conditions.

Section 7 - Handling and Storage

Handling: Wash thoroughly after handling. Use with adequate ventilation. Minimize dust generation and accumulation. Avoid contact with eyes, skin, and clothing. Do not get on skin or in eyes. Do not ingest or inhale. Wash clothing before reuse.

Storage: Store in a cool, dry place. Store in a cool, dry, well-ventilated area away from incompatible substances.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls: Use adequate ventilation to keep airborne concentrations low.

Exposure Limits

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
Calcium Chloride Hexahydrate	none listed	none listed	none listed

OSHA Vacated PELs: Calcium Chloride Hexahydrate: No OSHA Vacated PELs are listed for this chemical.

Personal Protective Equipment

Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin: Wear appropriate gloves to prevent skin exposure.

Clothing: Wear appropriate protective clothing to minimize contact with skin.

Respirators: Follow the OSHA respirator regulations found in 29CFR 1910.134 or European Standard EN 149. Always use a NIOSH or European Standard EN 149 approved respirator when necessary.

Section 9 - Physical and Chemical Properties

Physical State: Solid

Appearance: colourless

Odor: None reported

pH: 6.5-8.0 (1 M soln.)

Vapor Pressure: Not available.

Vapor Density: Not available.

Evaporation Rate:

Viscosity: Not available.

Boiling Point: Not applicable.

Freezing/Melting Point: 27-30C

Decomposition Temperature: Not available.

Solubility: Soluble in water

Specific Gravity/Density: 1.71

Molecular Formula: CaCl₂·6H₂O

Molecular Weight:**Section 10 - Stability and Reactivity**

Chemical Stability: Stable.

Conditions to Avoid: High temperatures, incompatible materials, contact with water.

Incompatibilities with Other Materials: Incompatible with boric oxide + calcium oxide, and bromine trifluoride; react with zinc to form explosive hydrogen gas; catalyzes exothermic polymerization of vinyl ether; explodes at room temperature when added to furan-2-peroxycarboxylic acid; and undergoes an exothermic (heat-producing) reaction with water.

Hazardous Decomposition Products: Chlorine, toxic fumes of sodium oxide.

Hazardous Polymerization: Will not occur.

Section 11 - Toxicological Information

RTECS#:

CAS# 7774-34-7: EV9830000

LD50/LC50:

Not available.

Carcinogenicity:

CAS# 7774-34-7: Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA.

Epidemiology: No data available.

Teratogenicity: No data available.

Reproductive Effects: No data available.

Neurotoxicity: No data available.

Mutagenicity: No data available.

Other Studies: No data available.

Section 12 - Ecological Information

Ecotoxicity: Not available.

Environmental Fate: Not available.

Physical/Chemical: Not available.

Other: Not available.

Section 13 - Disposal Considerations

Dispose of in a manner consistent with federal, state, and local regulations.

RCRA D-Series Maximum Concentration of Contaminants: None listed.

RCRA D-Series Chronic Toxicity Reference Levels: None listed.

RCRA F-Series: None listed.

RCRA P-Series: None listed.

RCRA U-Series: None listed.

Section 14 - Transport Information

	US DOT	IATA	RID/ADR	IMO	Canada TDG
Shipping Name:	No information available.	No information available.	No information available.	No information available. No information available.	
Hazard Class:					
UN Number:					
Packing Group:					

Section 15 - Regulatory Information

US FEDERAL

TSCA

CAS# 7774-34-7 is not on the TSCA Inventory. It is a hydrate and exempt from TSCA Inventory requirements (40CFR720.3(u)(2)).

Health & Safety Reporting List

None of the chemicals are on the Health & Safety Reporting List.

Chemical Test Rules

None of the chemicals in this product are under a Chemical Test Rule.

Section 12b

None of the chemicals are listed under TSCA Section 12b.

TSCA Significant New Use Rule

None of the chemicals in this material have a SNUR under TSCA.

SARA

Section 302 (RQ)

None of the chemicals in this material have an RQ.

Section 302 (TPQ)

None of the chemicals in this product have a TPQ.

Section 313

No chemicals are reportable under Section 313.

Clean Air Act:

This material does not contain any hazardous air pollutants. This material does not contain any Class 1 Ozone depletors. This material does not contain any Class 2 Ozone depletors.

Clean Water Act:

None of the chemicals in this product are listed as Hazardous Substances under the CWA. None of the chemicals in this product are listed as Priority Pollutants under the CWA. None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

OSHA:

None of the chemicals in this product are considered highly hazardous by OSHA.

STATE

CAS# 7774-34-7 is not present on state lists from CA, PA, MN, MA, FL, or NJ. California No Significant Risk Level: None of the chemicals in this product are listed.

European/International Regulations

European Labeling in Accordance with EC Directives**Hazard Symbols:**

XI

Risk Phrases:

R 36 Irritating to eyes.

Safety Phrases:

S 22 Do not inhale dust. S 24 Avoid contact with skin.

WGK (Water Danger/Protection)

CAS# 7774-34-7: No information available.

Canada

None of the chemicals in this product are listed on the DSL/NDSL list. This product has a WHMIS classification of D2B.

CAS# 7774-34-7 is not listed on Canada's Ingredient Disclosure List.

Exposure Limits**Section 16 - Additional Information****MSDS Creation Date:** 10/04/1995**Revision #7 Date:** 12/12/1997

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no way shall Fisher be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Fisher has been advised of the possibility of such damages.



Need help with a product? Send [email](#) to Fisher's customer service or call us at 1-800-766-7000.