



## Material Safety Data Sheet Calcium chloride, ACS

### Section 1 - Chemical Product and Company Identification

**MSDS Name:**  
Calcium chloride, ACS

**Catalog Numbers:**  
LC12725

**Synonyms:**  
Calcium dichloride dihydrate.

**Company Identification:**  
LabChem, Inc.  
200 William Pitt Way  
Pittsburgh, PA 15238

**Company Phone Number:**  
(412) 826-5230

**Emergency Phone Number:**  
(800) 424-9300

**CHEMTREC Phone Number:**  
(800) 424-9300

### Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name:	Percent
10035-04-08	Calcium chloride dihydrate	100%

### Section 3 - Hazards Identification

#### Emergency Overview

**Appearance:** *white solid*

**Warning!** May be harmful if swallowed. May cause severe respiratory and digestive tract irritation with possible burns. May cause severe eye and skin irritation with possible burns. May cause cardiac disturbances. Hygroscopic (absorbs moisture from air).

**Target Organs:** Eyes.

#### Potential Health Effects

**Eye:**

May cause severe eye irritation and possible eye burns.

**Skin:**

Causes skin irritation and possible burns, especially if the skin is wet or moist.

**Ingestion:**

May cause severe gastrointestinal irritation with nausea, vomiting and possible burns. May cause cardiac disturbances. May be harmful if swallowed. In very severe cases, seizures, rapid respiration, slow heartbeat, or death may result.

**Inhalation:**

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



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**Chronic:**

Effects may be delayed.

### 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 until no evidence of chemical remains. Get medical aid at once.

**Skin:**

Immediately flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid.

**Ingestion:**

Do not induce vomiting. If victim is conscious, give 2-4 glasses of water or milk. Get medical aid at once.

**Inhalation:**

Give artificial respiration if necessary. Move victim to fresh air. Keep victim warm and at rest. Get medical aid at once. Do not use mouth-to-mouth resuscitation.

**Notes to Physician:**

Treat symptomatically and supportively.

### Section 5 - Fire Fighting Measures

**General Information:**

As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear.

**Extinguishing Media:**

For small fires, use dry chemical, carbon dioxide, water spray or alcohol-resistant foam.

**Autoignition Temperature:**

No information found.

**Flash Point:**

No information found.

**NFPA Rating:**

Health-2; flammability-0; reactivity-0

**Explosion Limits:**

Lower: n/a Upper: n/a

### 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. Clean up spills immediately. Avoid creating airborne particles. Provide ventilation.



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### Section 7 - Handling and Storage

**Handling:**

Wash thoroughly after handling. Use with adequate ventilation. Do not get on skin or in eyes. Do not ingest or inhale. Always use cool water when dissolving calcium chloride. Heat evolved is significant. Avoid breathing dust, vapor, mist, or gas.

**Storage:**

Store capped at room temperature. Protect from heat and incompatibles.

### Section 8 - Exposure Controls, Personal Protection

**Engineering Controls:**

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

**Exposure Limits:**

Chemical Name:	ACGIH	NIOSH	OSHA
Calcium chloride	none listed	none listed	none listed

**OSHA Vacated PELs:**

Calcium chloride: No OSHA Vacated PELs are listed.

### Personal Protective Equipment

**Eyes:**

Do not wear contact lenses when working with chemicals. An eye wash fountain should be available in the immediate work area. Wear appropriate protective eyeglasses or chemical safety goggles as described in 29 CFR 1910.133.

**Skin:**

Wear appropriate protective gloves to prevent skin exposure.

**Clothing:**

Wear appropriate protective clothing to prevent skin exposure.

**Respirators:**

Follow the OSHA respirator regulations found in 29 CFR 1910.134. Use a NIOSH/MSHA approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

### Section 9 - Physical and Chemical Properties

<b>Physical State:</b>	Solid
<b>Color:</b>	White
<b>Odor:</b>	Odorless
<b>pH:</b>	4.5-8.5 (5% solution at 25°C)
<b>Vapor Pressure:</b>	Not available
<b>Vapor Density:</b>	Not available



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<b>Evaporation Rate:</b>	Not available
<b>Viscosity:</b>	Not available
<b>Boiling Point:</b>	Not available
<b>Freezing/Melting Point:</b>	175°C
<b>Decomposition Temperature:</b>	Not available
<b>Solubility in water:</b>	Soluble
<b>Specific Gravity/Density:</b>	Not available
<b>Molecular Formula:</b>	CaCl <sub>2</sub> ·2H <sub>2</sub> O
<b>Molecular Weight:</b>	147.01

### Section 10 - Stability and Reactivity

**Chemical Stability:**

Stable under normal storage and handling conditions.

**Conditions to Avoid:**

Dust generation, excess heat, exposure to water or moist air

**Incompatibilities with Other Materials:**

Bromine trifluoride, Furan-2-peroxycarboxylic acid. Solutions attack some metals.

**Hazardous Decomposition Products:**

Calcium oxide, hydrogen chloride.

**Hazardous Polymerization:**

Has not been reported.

### Section 11 - Toxicological Information

**RTECS:**

CAS# 10035-04-8: EV9810000

**LD50/LC50:**

CAS# 10035-04-8:

Oral, mouse: LD50 = 1940 mg/Kg;

Oral, rabbit: LD50 = 1384 mg/Kg;

Oral, rat: LD50 = 1 g/Kg.

**Carcinogenicity:**

CAS# 10035-04-8: Not listed by ACGIH, IARC, NTP, or CA Proposition 65.

**Epidemiology:**

No information available.

**Teratogenicity:**

No information available.

**Reproductive:**

No information available.

**Mutagenicity:**

Mutagenic effects have occurred in experimental animals.

**Neurotoxicity:**

No information available.



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### Section 12 - Ecological Information

No information available.

### Section 13 - Disposal Considerations

Dispose of in accordance with Federal, State, and local regulations.

### Section 14 - Transport Information

#### US DOT

**Shipping Name:** Not regulated.

**Hazard Class:**

**UN Number:**

**Packing Group:**

### Section 15 - Regulatory Information

#### US Federal

##### TSCA:

CAS# 10035-04-8 is not listed on the TSCA inventory because it is a hydrate. It is considered to be listed if the CAS number for the anhydrous form is on the inventory (40 CFR 720.3(u)(2)).

CAS# 10043-52-4 (anhydrous) is listed on the TSCA inventory. Does not have a Significant New Use Rule.

##### SARA Reportable Quantities (RQ):

CAS# 10035-04-8 does not have a RQ.

##### CERCLA/SARA Section 313:

Not reportable under Section 313.

##### OSHA - Highly Hazardous:

Not considered highly hazardous by OSHA.

#### US State

##### State Right to Know:

CAS# 10035-04-8 is not listed on the following state right to know lists: California, Florida, New Jersey, Pennsylvania, Minnesota, and Massachusetts.

##### California Regulations:

Not listed.

#### European/International Regulations

##### Canadian DSL/NDSL:

CAS# 10035-04-8 is listed on Canada's DSL List.

##### Canada Ingredient Disclosure List:

CAS# 10035-04-8 is not listed on the Ingredient Disclosure List.



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**Section 16 - Other Information**

MSDS Creation Date: July 24, 2006

Revision Date: None

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