



Fisher Science Education  
6771 Silver Crest Road, Nazareth, PA 18064 (800) 955-1177  
Emergency Number: (800) 255-3924

## **Material Safety Data Sheet**

### **Section 1 – Chemical Product and Company Identification**

Catalog Numbers: S25222A

Product Identity: Calcium Chloride, Dihydrate

**Chemical Family:** Not Applicable

**Synonyms:** None Listed

**Recommended Use:** Laboratory chemicals

Manufacturer's Name: AquaPhoenix Scientific, Inc., 9 Barnhart Dr., Hanover, PA 17331  
Emergency Contact Number (24hr): Chemtel (800) 255-3924

Issue Date: 07/21/12

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### **Section 2 – Hazard Identification**

**Emergency Overview** Causes eye irritation. May cause skin and respiratory tract irritation. Hygroscopic. Get medical attention if irritation develops.

**Appearance:** Beige-white solid

**Odor:** Odorless

**Target Organs:** Eyes

**Potential Health Effects/ Routes of Exposure:**

**Eyes:** Causes irritation.

**Skin:** May cause irritation.

**Ingestion:** May cause gastrointestinal irritation with nausea, burns, and vomiting.

**Inhalation:** May cause irritation to respiratory tract.

**Chronic Effect / Carcinogenicity:** None known.

**Aggravated Medical Conditions** No information available

These chemicals are not considered hazardous by OSHA.

See section 11 for toxicological information. See section 12 for potential environmental effects.

### **Section 3 – Composition, Information on Ingredients**

Calcium chloride, dihydrate, CAS# 10035-04-8, >95% w/w

Calcium chloride, CAS# 10043-52-4

### **Section 4 – First Aid**

**Eyes:** Immediately flush eyes with water for at least 15 minutes. Get medical assistance immediately.

**Skin:** Flush with water for 15 minutes. Get medical assistance if irritation develops.

**Ingestion:** DO NOT induce vomiting. Get medical assistance.

**Inhalation:** Remove to fresh air. Give artificial respiration if necessary. If breathing is difficult, give oxygen.

**Notes to Physician:** Treat symptomatically.

### **Section 5 – Fire Fighting Measures**

**Flash Point:** No information available    **Autoignition Temperature:** No information available.

**Explosion Limits Upper:** No data available      **Lower:** No data available  
**Extinguishing Media:** Nonflammable. Use appropriate means to extinguish surrounding fire.  
**Unsuitable Extinguishing Media:** No information available.  
**Fire & Explosion Hazards:** Not considered to be a fire or explosion hazard.  
**Fire Fighting Instructions / Equipment:** Use normal procedures. Use protective clothing. Use NIOSH-approved breathing equipment.  
**Hazardous Combustion Products:** No information Available  
**Sensitivity to mechanical impact** No information available.  
**Sensitivity to static discharge** No information available.  
**Specific Hazards Arising from the Chemical:** Decomposes upon heating to produce corrosive and/or toxic fumes.  
**NFPA Rating:** (estimated) Health: 2; Flammable: 0; Reactivity: 1

## **Section 6 – Accidental Release Measures**

**Personal Precautions** Use personal protective equipment. Ensure adequate ventilation. Avoid contact with skin, eyes and clothing. Avoid dust formation.  
**Environmental Precautions** Should not be released into the environment.  
**Methods for Containment and Clean Up** Sweep up spill and containerize for disposal. Use adequate ventilation. Always obey local regulations.

## **Section 7 – Handling and Storage**

**Handling:** Wash hands after handling. Avoid contact with skin and eyes. Use adequate Ventilation.  
**Storage:** Keep container tightly closed in a cool, dry, well-ventilated area. Protect from freezing and physical damage.

## **Section 8 – Exposure Controls, Personal Protection**

Calcium chloride, dihydrate, CAS# 10035-04-8, ACGIH TLV: NA, OSHA PEL: NA

**Engineering Measures/ General Hygiene:** Normal ventilation is adequate. Ensure eyewash and safety showers are available.  
**Personal Protection Equipment:** **Skin Protection:** Chemical resistant gloves.  
**Eye/Face Protection:** Safety Glasses or goggles. **Respiratory Protection:** Normal ventilation is adequate.

## **Section 9 – Physical and Chemical Properties**

<b>Appearance/Physical State:</b> Beige-white solid	
<b>Odor:</b> Odorless	<b>% Volatility:</b> No Information Available
<b>Boiling Point:</b> No Information Available	<b>Specific Gravity:</b> 0.830
<b>Melting Point:</b> 175C	<b>Vapor Pressure:</b> 0.01 mmHg @ 20C
<b>Vapor Density:</b> No Information Available	<b>Flash Point:</b> Not Applicable
<b>Evaporation Rate:</b> No Information Available	<b>Coefficient of water/oil distribution:</b> Not Available
<b>pH:</b> 4.5 - 6.5 (100 g/L aq.sol.)	<b>Odor Threshold:</b> Not Available
<b>Flammability:</b> No Information Available	<b>Decomposition Temperature:</b> Not Available
<b>Solubility:</b> Soluble in water	<b>Partition Coefficient n-octanol/water:</b> Not Available
<b>Relative Density:</b> No Information Available	<b>Molecular Weight:</b> 147.02

## **Section 10 – Stability and Reactivity**

**Chemical Stability:** Hygroscopic.  
**Incompatible Materials:** Strong oxidizers.  
**Conditions to Avoid:** Incompatible materials, dust generation, excess heat, exposure to moist air or water.  
**Hazardous Decomposition Products:** Oxides of calcium and hydrogen chloride.  
**Hazardous Polymerization:** Does not occur  
**Hazardous Reactions:** None under normal processing.

## **Section 11 – Toxicological Information**

**Routes of Exposure/Symptoms/Corrosiveness** – See Section 2

LD50 orl-rat: 1000 mg/kg

LC50 inhalation-rat: NA

**Irritation:** Causes eye irritation

**Toxicologically Synergistic:** No Information Available

**Chronic Exposure**

**Carcinogenicity** There are no known carcinogens in this product

**Sensitization** No information available.

**Mutagenic Effects** No information available.

**Reproductive Effects** No information available.

**Developmental Effects (Immediate/Delayed)** No information available.

**Teratogenicity** No information available.

**Other Adverse Effects** No information available.

**Endocrine Disruptor Information** No information available

**Section 12 – Ecological Information**

**Ecotoxicity:** Do not release into the environment.

**Persistence and Degradability:** No Information Available

**Mobility:** 0.05

**Bioaccumulation/ Accumulation:** No Information Available

**Section 13 – Disposal Considerations**

**Waste Disposal/Waste Disposal of Packaging:** Containerize for disposal.

All chemical waste generators must determine whether a discarded chemical is classified as hazardous waste. Comply with all local, state, and federal regulations.

**Section 14 – Transport Information**

**DOT - Not Regulated**

**Section 15 – Regulatory Information (not meant to be all inclusive)**

**OSHA Status:** This chemical is not considered hazardous by OSHA.

**Canada DSL:** This chemical is not listed on Canada's DSL list.

**TSCA:** CAS# 10035-04-8 is not 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 (40CFR720.3(u)(2)).

CAS# 10043-52-4 is listed on the TSCA inventory.

**SARA Title III Section 313:** Not Applicable

**RCRA Status:** Not Applicable

**CERCLA Reportable Quantity:** Not Applicable

**WHMIS:** D2B: Toxic Material.

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

**Section 16 – Additional Information**

**Disclaimer:** The information on this MSDS applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. It is the user's responsibility to determine the suitability and completeness of this information for his own particular use. No warranty is implied regarding the accuracy of the data or the results to be obtained from the products use.