

# Safety Data Sheet

according to 29CFR1910/1200 and GHS Rev. 3

Effective date : 11.18.2014

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## Calcium Chloride,

### SECTION 1: Identification of the substance/mixture and of the supplier

**Product name:** Calcium Chloride,

**Manufacturer/Supplier Trade name:**

**Manufacturer/Supplier Article number:** S25223

**Recommended uses of the product and restrictions on use:**

**Manufacturer Details:**

AquaPhoenix Scientific, Inc  
9 Barnhart Drive, Hanover, PA 17331  
(717) 632-1291

**Supplier Details:**

Fisher Science Education  
6771 Silver Crest Road, Nazareth, PA 18064  
(724)517-1954

**Emergency telephone number:**

**Fisher Science Education**  
Emergency Telephone No.: 800-535-5053

### SECTION 2: Hazards identification

**Classification of the substance or mixture:**



**Irritant**

Eye irritation, category 2A

Eye Irritation 2.

**Signal word:** Warning

**Hazard statements:**

Causes serious eye irritation.

**Precautionary statements:**

Wear protective gloves/protective clothing/eye protection/face protection.

Wash ... thoroughly after handling.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do - continue rinsing.

If eye irritation persists get medical advice/attention.

**Other Non-GHS Classification:**

WHMIS

D2B



NFPA/HMIS

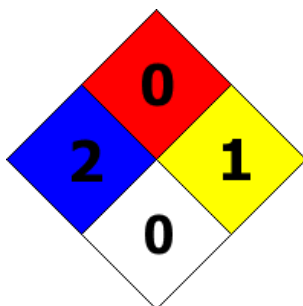
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### Calcium Chloride,



NFPA SCALE (0-4)

|                     |   |
|---------------------|---|
| Health              | 2 |
| Flammability        | 0 |
| Physical Hazard     | 1 |
| Personal Protection | X |

HMIS RATINGS (0-4)

### SECTION 3: Composition/information on ingredients

#### Ingredients:

|                           |                                |       |
|---------------------------|--------------------------------|-------|
| CAS 10043-52-4            | Calcium Chloride,Anh,ACS,2.5KG | 100 % |
| Percentages are by weight |                                |       |

### SECTION 4: First aid measures

#### Description of first aid measures

##### After inhalation:

Move exposed person to fresh air; if breathing is difficult, give oxygen. Loosen clothing and place exposed individual in a comfortable position. Seek immediate medical attention.

##### After skin contact:

Wash hands and exposed skin with soap and plenty of water. Rinse or flush skin/hair gently with water for at least 20 minutes. Seek medical attention if irritation persists or if concerned.

##### After eye contact:

Rinse or flush eye gently with water for at least 15-20 minutes, lifting upper and lower lids. Seek medical attention if irritation persists or if concerned. Protect unexposed eye.

##### After swallowing:

Rinse mouth with water (never give anything by mouth to an unconscious person). Do not induce vomiting. Seek medical attention if irritation persists or if concerned.

#### Most important symptoms and effects, both acute and delayed:

Irritation- all routes of exposure. Shortness of breath. Headache. Nausea, vomiting, diarrhea.

#### Indication of any immediate medical attention and special treatment needed:

If seeking medical attention provide SDS document to physician. Physician should treat symptomatically.

### SECTION 5: Firefighting measures

#### Extinguishing media

##### Suitable extinguishing agents:

Nonflammable. Use appropriate means to extinguish surrounding fire.

##### Unsuitable extinguishing agents: None

#### Special hazards arising from the substance or mixture:

Hydrogen chloride gas, Calcium oxide. Not considered to be a fire or explosion hazard. Thermal decomposition can lead to release of irritating gases and vapors.

#### Advice for firefighters:

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### Protective equipment:

Use normal procedures. Use protective clothing. Use NIOSH approved breathing equipment.

**Additional information (precautions):** None

## SECTION 6: Accidental release measures

### Personal precautions, protective equipment and emergency procedures:

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 and material for containment and cleaning up:

Sweep up spill and containerize for disposal. Use adequate ventilation. Always obey local regulations.

**Reference to other sections:** None

## SECTION 7: Handling and storage

### Precautions for safe handling:

Wash hands after handling. Avoid contact with skin, eyes and clothes. Do not ingest or inhale. Use adequate ventilation.

### Conditions for safe storage, including any incompatibilities:

Keep container tightly closed in a cool, dry, well-ventilated area. Protect from freezing and physical damage. Keep product from moisture.

## SECTION 8: Exposure controls/personal protection



### Control Parameters:

10043-52-4, Nuisance dust, ACGIH TLV TWA:10mg/m3 (inhalable particles).  
10043-52-4, Nuisance dust, OSHA PEL TWA: 15 mg/m3 (total dust).

### Appropriate Engineering controls:

Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use or handling. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapor and mists below the applicable workplace exposure limits (Occupational Exposure Limits-OELs) indicated above.

### Respiratory protection:

Not required under normal conditions of use with adequate ventilation. Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. When necessary use NIOSH approved breathing equipment.

### Protection of skin:

Chemical resistant gloves. Wear protective clothing. Select glove material impermeable and resistant to the substance. Select glove material based on rates of diffusion and degradation. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Use proper glove removal technique without touching outer surface. Avoid skin contact with used gloves.

### Eye protection:

Safety glasses or goggles.

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### Calcium Chloride,

#### General hygienic measures:

Perform routine housekeeping. Wash hands after handling. Avoid contact with skin, eyes and clothes. Do not ingest or inhale. Use adequate ventilation. Before rewearing, wash contaminated clothing.

### SECTION 9: Physical and chemical properties

|                                            |                                                                                                                                   |                                                 |                                                            |
|--------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|------------------------------------------------------------|
| <b>Appearance (physical state, color):</b> | Beige solid                                                                                                                       | <b>Explosion limit lower:</b>                   | Not determined                                             |
|                                            |                                                                                                                                   | <b>Explosion limit upper:</b>                   | Not determined                                             |
| <b>Odor:</b>                               | Odorless                                                                                                                          | <b>Vapor pressure at 20°C:</b>                  | Not determined                                             |
| <b>Odor threshold:</b>                     | Not determined                                                                                                                    | <b>Vapor density:</b>                           | Not determined                                             |
| <b>pH-value:</b>                           | 8-10 (100g/L aq.sol.)                                                                                                             | <b>Relative density:</b>                        | Not determined                                             |
| <b>Melting/Freezing point:</b>             | 782C                                                                                                                              | <b>Solubilities:</b>                            | Soluble.                                                   |
| <b>Boiling point/Boiling range:</b>        | >1600C @ 760 mmHg                                                                                                                 | <b>Partition coefficient (n-octanol/water):</b> | Not determined                                             |
| <b>Flash point (closed cup):</b>           | Not determined                                                                                                                    | <b>Auto/Self-ignition temperature:</b>          | Not determined                                             |
| <b>Evaporation rate:</b>                   | Not determined                                                                                                                    | <b>Decomposition temperature:</b>               | Not determined                                             |
| <b>Flammability (solid, gaseous):</b>      | Not determined                                                                                                                    | <b>Viscosity:</b>                               | a. Kinematic: Not determined<br>b. Dynamic: Not determined |
| <b>Density at 20°C:</b>                    | Not determined<br><b>Additional property:</b> Hygroscopic (absorbs moisture from the air)<br><b>Specific Gravity:</b> Approx 2.15 |                                                 |                                                            |

### SECTION 10: Stability and reactivity

**Reactivity:** None

**Chemical stability:** None

**Possible hazardous reactions:** None

**Conditions to avoid:** None

**Incompatible materials:**

Strong acids, Borane/boron oxides, Zinc, Calcium oxide, Methyl vinyl ether, Calcium chloride is attacked by bromine trifluoride. Strong oxidizers, metals.

**Hazardous decomposition products:**

Chlorine, hydrogen chloride gas.

### SECTION 11: Toxicological information

**Acute Toxicity:**

**Oral:**

10043-52-4 LD50 oral-rat: 1000 mg/kg

**Chronic Toxicity:** No additional information.

**Corrosion Irritation:**

**Dermal:**

Rabbit: No irritation 10043-52-4

**Ocular:**

Rabbit: Moderate irritation 10043-52-4

Section 2 Classified as eye irritant

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**Sensitization:** No additional information.

**Numerical Measures:** No additional information.

**Carcinogenicity:** No additional information.

**Mutagenicity:**

Mutagenic effects have occurred in experimental animals.

**Reproductive Toxicity:** No additional information.

### SECTION 12: Ecological information

**Ecotoxicity:**

10043-52-4: Fish LC50 - Lepomis macrochirus - 10,650 mg/l - 96 h

10043-52-4: invertebrates EC50 - Daphnia magna (Water flea) - 2,400 mg/l - 48 h

**Persistence and degradability:** No additional information.

**Bioaccumulative potential:** No additional information.

**Mobility in soil:** No additional information.

**Other adverse effects:** No additional information.

### SECTION 13: Disposal considerations

**Waste disposal recommendations:**

None

### SECTION 14: Transport information

#### US DOT

**UN Number:**

ADR, ADN, DOT, IMDG, IATA

Not Regulated

**Limited Quantity Exception:**

None

**Bulk:**

**RQ (if applicable):** None

**Proper shipping Name:** Not Regulated.

**Hazard Class:** None

**Packing Group:** Not Regulated.

**Marine Pollutant (if applicable):** No additional information.

**Comments:** None

**Non Bulk:**

**RQ (if applicable):** None

**Proper shipping Name:** Not Regulated.

**Hazard Class:** None

**Packing Group:** Not Regulated.

**Marine Pollutant (if applicable):** No additional information.

**Comments:** None

### SECTION 15: Regulatory information

**United States (USA)**

**SARA Section 311/312 (Specific toxic chemical listings):**

Acute

**SARA Section 313 (Specific toxic chemical listings):**

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### Calcium Chloride,

None of the ingredients are listed.

**RCRA (hazardous waste code):**

None of the ingredients are listed.

**TSCA (Toxic Substances Control Act):**

All ingredients are listed.

**CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act):**

None of the ingredients are listed.

**Proposition 65 (California):**

**Chemicals known to cause cancer:**

None of the ingredients are listed.

**Chemicals known to cause reproductive toxicity for females:**

None of the ingredients are listed.

**Chemicals known to cause reproductive toxicity for males:**

None of the ingredients are listed.

**Chemicals known to cause developmental toxicity:**

None of the ingredients are listed.

**Canada**

**Canadian Domestic Substances List (DSL):**

All ingredients are listed.

**Canadian NPRI Ingredient Disclosure list (limit 0.1%):**

None of the ingredients are listed.

**Canadian NPRI Ingredient Disclosure list (limit 1%):**

10043-52-4 Calcium Chloride,Anh,ACS,2.5KG.

### SECTION 16: Other information

**GHS Full Text Phrases:** None

**Abbreviations and Acronyms:** None

**Effective date:** 11.18.2014

**Last updated:** 06.19.2015