SECTION 1: Identification

1.1. Identification

Product form: Substance
Substance name: Calcium Chloride, Dihydrate
Chemical name: calcium chloride
CAS No: 10035-04-8
Product code: LC12725
Formula: CaCl2·2H2O

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture: For laboratory and manufacturing use only.
Recommended use: Laboratory chemicals
Restrictions on use: Not for food, drug or household use

1.3. Details of the supplier of the safety data sheet

LabChem Inc
Jackson's Pointe Commerce Park Building 1000, 1010 Jackson's Pointe Court
Zelienople, PA 16063 - USA
T 412-826-5230 - F 724-473-0647
info@labchem.com - www.labchem.com

1.4. Emergency telephone number

Emergency number: CHEMTREC: 1-800-424-9300 or 011-703-527-3887

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS-US classification
Serious eye damage/eye irritation Category 2A H319
Full text of H statements: see section 16

2.2. Label elements

GHS-US labeling
Hazard pictograms (GHS-US):

![GHS07]

Signal word (GHS-US): Warning
Hazard statements (GHS-US): H319 - Causes serious eye irritation
Precautionary statements (GHS-US):
P264 - Wash exposed skin thoroughly after handling
P280 - Wear protective gloves, eye protection
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 advice/attention

2.3. Other hazards

Other hazards not contributing to the classification: None under normal conditions.

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/Information on ingredients

3.1. Substances

Name: Calcium Chloride, Dihydrate (Main constituent)
Product identifier: (CAS No) 10035-04-8
%: 100
GHS-US classification: Eye Irrit. 2A, H319
Calcium Chloride, Dihydrate
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Full text of hazard classes and H-statements: see section 16

3.2. Mixtures
Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures
First-aid measures general: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
First-aid measures after inhalation: Allow victim to breathe fresh air. Allow the victim to rest.
First-aid measures after skin contact: Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.
First-aid measures after eye contact: 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.
First-aid measures after ingestion: Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

4.2. Most important symptoms and effects, both acute and delayed
Symptoms/injuries after eye contact: Causes serious eye irritation.

4.3. Indication of any immediate medical attention and special treatment needed
Obtain medical assistance.

SECTION 5: Firefighting measures

5.1. Extinguishing media
Unsuitable extinguishing media: Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture
No additional information available

5.3. Advice for firefighters
Firefighting instructions: Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.
Protection during firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel
Protective equipment: Safety glasses. Gloves.
Emergency procedures: Evacuate unnecessary personnel.

6.1.2. For emergency responders
Protective equipment: Equip cleanup crew with proper protection.
Emergency procedures: Ventilate area.

6.2. Environmental precautions
Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up
Methods for cleaning up: On land, sweep or shovel into suitable containers. Minimize generation of dust. Store away from other materials.

6.4. Reference to other sections
See Heading 8. Exposure controls and personal protection.

SECTION 7: Handling and storage

7.1. Precautions for safe handling
Precautions for safe handling: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor.
Hygiene measures: Wash exposed skin thoroughly after handling.

7.2. Conditions for safe storage, including any incompatibilities
Storage conditions: Keep container closed when not in use.
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Incompatible products : silver nitrate. Strong acids.
Incompatible materials : Sources of ignition. Direct sunlight.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters
No additional information available

8.2. Exposure controls
Appropriate engineering controls : Emergency eye wash fountains should be available in the immediate vicinity of any potential exposure.
Personal protective equipment : Safety glasses.

Eye protection : Chemical goggles or safety glasses.
Respiratory protection : Respiratory protection not required in normal conditions.
Other information : Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties
Physical state : Solid
Appearance : White powder or lumps.
Color : white
Odor : None.
Odor threshold : No data available
pH : No data available
Melting point : No data available
Freezing point : No data available
Boiling point : No data available
Flash point : No data available
Relative evaporation rate (butyl acetate=1) : No data available
Flammability (solid, gas) : Non flammable.
Vapor pressure : No data available
Relative vapor density at 20 °C : No data available
Relative density : No data available
Specific gravity / density : 0.835 g/cm³
Molecular mass : 147.02 g/mol
Solubility : Soluble in water.
            Water: 97.7 g/100ml
            Ethanol: 50 g/100ml
Log Pow : No data available
Auto-ignition temperature : No data available
Decomposition temperature : No data available
Viscosity, kinematic : No data available
Viscosity, dynamic : No data available
Explosion limits : No data available
Explosive properties : No data available
Oxidizing properties : No data available

9.2. Other information
VOC content : 0 %
**Calcium Chloride, Dihydrate**

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<table>
<thead>
<tr>
<th>SECTION 10: Stability and reactivity</th>
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</thead>
<tbody>
<tr>
<td><strong>10.1. Reactivity</strong></td>
</tr>
<tr>
<td>No additional information available</td>
</tr>
<tr>
<td><strong>10.2. Chemical stability</strong></td>
</tr>
<tr>
<td>Stable under normal conditions.</td>
</tr>
<tr>
<td><strong>10.3. Possibility of hazardous reactions</strong></td>
</tr>
<tr>
<td>Not established.</td>
</tr>
<tr>
<td><strong>10.4. Conditions to avoid</strong></td>
</tr>
<tr>
<td>Direct sunlight. Extremely high or low temperatures.</td>
</tr>
<tr>
<td><strong>10.5. Incompatible materials</strong></td>
</tr>
<tr>
<td>Strong acids. silver nitrate.</td>
</tr>
<tr>
<td><strong>10.6. Hazardous decomposition products</strong></td>
</tr>
<tr>
<td>Hydrogen chloride.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SECTION 11: Toxicological information</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>11.1. Information on toxicological effects</strong></td>
</tr>
<tr>
<td>Likely routes of exposure: Skin and eye contact; Inhalation</td>
</tr>
<tr>
<td>Acute toxicity: Not classified</td>
</tr>
<tr>
<td>Skin corrosion/irritation: Not classified</td>
</tr>
<tr>
<td>Serious eye damage/irritation: Causes serious eye irritation.</td>
</tr>
<tr>
<td>Respiratory or skin sensitization: Not classified</td>
</tr>
<tr>
<td>Germ cell mutagenicity: Not classified</td>
</tr>
<tr>
<td>Carcinogenicity: Not classified</td>
</tr>
<tr>
<td>Reproductive toxicity: Not classified</td>
</tr>
<tr>
<td>Specific target organ toxicity – single exposure: Not classified</td>
</tr>
<tr>
<td>Specific target organ toxicity – repeated exposure: Not classified</td>
</tr>
<tr>
<td>Aspiration hazard: Not classified</td>
</tr>
<tr>
<td>Potential Adverse human health effects and symptoms: Based on available data, the classification criteria are not met.</td>
</tr>
<tr>
<td>Symptoms/injuries after eye contact: Causes serious eye irritation.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SECTION 12: Ecological information</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>12.1. Toxicity</strong></td>
</tr>
<tr>
<td>No additional information available</td>
</tr>
<tr>
<td><strong>12.2. Persistence and degradability</strong></td>
</tr>
<tr>
<td><strong>Calcium Chloride, Dihydrate (10035-04-8)</strong></td>
</tr>
<tr>
<td>Persistence and degradability: Not established.</td>
</tr>
<tr>
<td><strong>12.3. Bioaccumulative potential</strong></td>
</tr>
<tr>
<td><strong>Calcium Chloride, Dihydrate (10035-04-8)</strong></td>
</tr>
<tr>
<td>Bioaccumulative potential: Not established.</td>
</tr>
<tr>
<td><strong>12.4. Mobility in soil</strong></td>
</tr>
<tr>
<td>No additional information available</td>
</tr>
<tr>
<td><strong>12.5. Other adverse effects</strong></td>
</tr>
<tr>
<td>Other information: Avoid release to the environment.</td>
</tr>
</tbody>
</table>
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SECTION 13: Disposal considerations

13.1. Waste treatment methods
Waste disposal recommendations: Dispose in a safe manner in accordance with local/national regulations.
Ecology - waste materials: Avoid release to the environment.

SECTION 14: Transport information

Department of Transportation (DOT)
In accordance with DOT
Not regulated

SECTION 15: Regulatory information

15.1. US Federal regulations
Calcium Chloride, Dihydrate (10035-04-8)
Not listed on the United States TSCA (Toxic Substances Control Act) inventory

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory except for:

| Calcium Chloride, Dihydrate | CAS No 10035-04-8 | 100% |

This product or mixture does not contain a toxic chemical or chemicals in excess of the applicable de minimis concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

15.2. International regulations

CANADA
Calcium Chloride, Dihydrate (10035-04-8)
Not listed on the Canadian DSL (Domestic Substances List)

| WHMIS Classification | Class D Division 2 Subdivision B - Toxic material causing other toxic effects |

EU-Regulations
No additional information available

National regulations
Calcium Chloride, Dihydrate (10035-04-8)
Not listed on the Canadian IDL (Ingredient Disclosure List)

15.3. US State regulations
California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

SECTION 16: Other information

Revision date: 12/29/2016
Other information: None.

Full text of H-phrases: see section 16:

H319 | Causes serious eye irritation

NFPA health hazard: 1 - Materials that, under emergency conditions, can cause significant irritation.
NFPA fire hazard: 0 - Materials that will not burn under typical fire conditions, including intrinsically noncombustible materials such as concrete, stone, and sand.
NFPA reactivity: 0 - Material that in themselves are normally stable, even under fire conditions.
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HMIS III Rating

Health : 1 Slight Hazard - Irritation or minor reversible injury possible
Flammability : 0 Minimal Hazard - Materials that will not burn
Physical : 0 Minimal Hazard - Materials that are normally stable, even under fire conditions, and will NOT react with water, polymerize, decompose, condense, or self-react. Non-Explosives.

Personal protection : A
A - Safety glasses

SDS US LabChem

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