



Product Name: Calcium
Date: 1/14/2025

SECTION 1 **IDENTIFICATION**

Supplier: Phoenix Products Company
55 Container Drive
Terryville, CT 06786
(860) 589-7502

Distributor:

U.S. PERS Emergency Telephone: 1-800-633-8253

Product Name: **Calcium**

Synonyms: Calcium Chloride, Hydrated; Calcium Chloride

Chemical Name: Calcium Chloride Dihydrate

Chemical Formula: **CaCl₂ · 2H₂O**

CAS Number: 10035-04-8

Product Use: Raises Calcium Hardness

SECTION 2 **HAZARDOUS COMPONENTS**

EMERGENCY OVERVIEW

WARNING



Health Hazards

Acute toxicity, oral	Category 4
Serious eye damage/eye irritation	Category 2
Specific target organ toxicity, single exposure	Category 3 respiratory tract irritation
Specific target organ toxicity, repeated	Category 2 (blood system) exposure

Hazard Statement(s)

H302: Harmful if swallowed
H319: Causes serious eye irritation
H335: May cause respiratory irritation
H373: May cause damage to organs through prolonged or repeated exposure
H412: Harmful to aquatic life with long-lasting effects

Precautionary Statement(s)

P271: Use only outdoors or in a well-ventilated area.
P264: Wash thoroughly after handling.
P270: Do not eat, drink or smoke when using this product.
P280: Wear eye/face protection.
P321: Specific treatment (see First Aid Measures on this label).
P403: Store in a well ventilated place.
P233: Keep container tightly closed.
P405: Store locked up.
P501: Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

Environmental Hazards

Hazardous to the aquatic environment, acute hazard	Category 3
Hazardous to the aquatic environment, long-term hazard	Category 3



SECTION 3 **COMPOSITION / INFORMATION ON INGREDIENTS**

<u>Component</u>	<u>CAS Number</u>	<u>Percent</u>
Calcium Chloride Dihydrate	10035-04-8	100%

SECTION 4 **FIRST-AID MEASURES**

Inhalation: Move to fresh air. Call a POISON CENTER or doctor/physician if you feel unwell.

Skin Contact: Get medical attention if irritation develops and persists.

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.

Ingestion: IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. Rinse mouth.

Most important symptoms/effects, acute and delayed: Irritation of eyes and mucous membranes. Prolonged exposure may cause chronic effects.

Indication of immediate medical attention and special treatment needed: In case of shortness of breath, give oxygen. Keep victim warm. Keep victim under observation. Symptoms may be delayed. Provide general supportive measures and treat symptomatically.

General Information: Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. In the case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

SECTION 5 **FIRE FIGHTING MEASURES**

Suitable Extinguishing Media: Use extinguishing agent suitable for type of surrounding fire. Water.

Unsuitable Extinguishing Media: None known.

Specific hazards arising from the chemical: Not applicable.

Special protective equipment and precautions for firefighters: Wear suitable protective equipment.

Fire-fighting Equipment/Instructions: In the event of fire, cool tanks with water spray. Water runoff can cause environmental damage.

Specific Methods: Cool containers exposed to flames with water until well after the fire is out.

SECTION 6 **ACCIDENTAL RELEASE MEASURES**

Personal precautions, protective equipment and emergency procedures: Keep unnecessary personnel away. Local authorities should be advised if significant spillages cannot be contained. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep people away from and upwind of spill/leak. Keep upwind. Keep out of low areas. Ensure adequate ventilation. Wear appropriate personal protective equipment.

Methods and materials for containment and cleaning up: This product is miscible in water. Stop the flow of material, if this is without risk. Collect spillage. Following product recovery, flush area with water. Prevent entry into waterways, sewer, basements or confined areas. For waste disposal, see section 13 of the SDS.

Environmental Precautions: Contact local authorities in case of spillage to drain/aquatic environment. Avoid discharge into drains, water courses or onto the ground. Avoid release to the environment. Prevent further leakage or spillage if safe to do so. Do not contaminate water.



SECTION 7 **HANDLING AND STORAGE**

Precautions for safe handling: Do not taste or swallow. Avoid contact with eyes. When using, do not eat, drink or smoke. Wash hands thoroughly after handling. Avoid release to the environment. Do not empty into drains.

Conditions for safe storage, including any incompatibilities: Keep container tightly closed. Keep out of the reach of children. Store in a cool, dry place out of direct sunlight.

SECTION 8 **EXPOSURE CONTROLS/PERSONAL PROTECTION**

Occupational Exposure Limits: No exposure limits noted for ingredient(s).

Biological Limit Values: No biological exposure limits noted for the ingredient(s).

Appropriate Engineering Controls: Provide eyewash station.

Individual protection measures, such as personal protective equipment

Eye/face Protection: Wear eye/face protection.

Skin Protection

Hand Protection: Wear protective gloves.

Other: Normal work clothing (long sleeved shirts and long pants) is recommended.

Respiratory Protection: In case of insufficient ventilation, wear suitable respiratory equipment.

Thermal Hazards: Not available.

General Hygiene Considerations: When using, do not eat, drink or smoke. Avoid contact with eyes. Wash hands before breaks and immediately after handling the product. Handle in accordance with good industrial hygiene and safety practice.

SECTION 9 **PHYSICAL AND CHEMICAL PROPERTIES**

Appearance:	White Crystalline Solid.
Odor:	Odorless.
Odor Threshold:	Not available.
pH:	5 – 8 at 147 g/l at 25°C (77°F)
Boiling Point:	Not available.
Melting Point:	175.5°C (347.9°F)
Flash Point:	Not available.
Evaporation Rate:	Not available.
Flammability (solid, gas):	Not applicable.
Upper/lower flammability or explosive limits	
Flammability limit - lower (%):	Not available.
Flammability limit - upper (%):	Not available.
Explosive limit - lower (%):	Not available.
Explosive limit - upper (%):	Not available.
Vapor Density:	Not available.
Relative Density:	Not available.
Solubility(ies):	Very soluble
Partition coefficient (n-octanol/water):	Not available.
Auto-ignition Temperature:	Not available.
Decomposition Temperature:	When heated to decomp emits toxic fumes of hydrogen chloride.
Viscosity:	Not available.
Other information	
Density:	2.5 g/cm ³ approximately
Molecular Formula:	CaCl ₂ ·2H ₂ O
Molecular Weight:	147.02 g/mol
Specific Gravity:	2.5



SECTION 10 **STABILITY AND REACTIVITY**

Reactivity: Not available.

Chemical Stability: Material is stable under normal conditions.

Possibility of hazardous reactions: Hazardous polymerization does not occur.

Conditions to Avoid: None under normal conditions. Incompatible materials None known.

Hazardous Decomposition Products: Hydrogen chloride.

SECTION 11 **TOXICOLOGICAL INFORMATION**

Information on likely routes of exposure

Ingestion: Harmful if swallowed.

Inhalation: May cause irritation to the respiratory system.

Skin contact: Based on available data, the classification criteria are not met.

Eye contact: Causes serious eye irritation.

Symptoms related to the physical, chemical and toxicological characteristics: Not available.

Information on toxicological effects

Acute toxicity: Harmful if swallowed.

Product	Test (Acute)	Species	Test Results
Calcium Chloride, Dihydrate (CAS 10035-04-8)	Oral LD50	Rat	1000 mg/kg
	Other LD50	Mouse	42 mg/kg

Skin corrosion/irritation: Based on available data, the classification criteria are not met.

Serious eye damage/eye irritation: Causes serious eye irritation.

Respiratory sensitization: Based on available data, the classification criteria are not met.

Skin sensitization: Based on available data, the classification criteria are not met.

Germ cell mutagenicity: Based on available data, the classification criteria are not met.

Carcinogenicity: This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

Reproductive toxicity: Based on available data, the classification criteria are not met.

Specific target organ toxicity - single exposure: Respiratory tract irritation.

Specific target organ toxicity - repeated exposure: May cause damage to organs (blood system) through prolonged or repeated exposure.

Aspiration hazard: Based on available data, the classification criteria are not met.

Chronic effects: May cause damage to organs through prolonged or repeated exposure.

SECTION 12 **ECOLOGICAL INFORMATION**

Ecotoxicity: Harmful to aquatic life with long lasting effects. Accumulation in aquatic organisms is expected. Contains a substance, which causes risk of hazardous effects to the environment.

Product			Species	Test Results
Calcium Chloride, Dihydrate (CAS 10035-04-8)	Crustacea	EC50	Water flea (Daphnia magna)	52 mg/l, 48 hours
	Fish	LC50	Fathead minnow (Pimephales promelas)	3930 – 5360 mg/l, 96 hours



SECTION 12 **ECOLOGICAL INFORMATION - Continued**

Persistence and degradability: No data is available on the degradability of this product.

Bioaccumulative potential: Not available.

Mobility in soil: Not available.

Other adverse effects: Not available.

SECTION 13 **DISPOSAL CONSIDERATIONS**

Disposal Instructions: Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dilute waste in large quantities of water and flush into sewer connected to wastewater treatment system in compliance with applicable laws and regulations. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.

Local disposal regulations: Not available.

Hazardous waste code: Not regulated.

Waste from residues / unused products: Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Contaminated packaging: Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

SECTION 14 **TRANSPORTATION DATA**

DOT: Not Regulated

TDG: Not Regulated

MEX: Not Regulated

IMDG: Not Regulated

IATA: Not Regulated

SECTION 15 **REGULATORY INFORMATION**

US federal regulations: CERCLA/SARA Hazardous Substances - Not applicable.
All components are on the U.S. EPA TSCA Inventory List.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not on regulatory list.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.



SECTION 15	REGULATORY INFORMATION -Continued
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Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories	Immediate Hazard - Yes
	Delayed Hazard - No
	Fire Hazard - No
	Pressure Hazard - No
	Reactivity Hazard - No

SARA 302 Extremely hazardous substance: No

SARA 311/312 Hazardous chemical: No

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA): Not regulated.

Drug Enforcement Administration (DEA). List 2, Essential Chemicals (21 CFR 1310.02(b) and 1310.04(f)(2) and Chemical Code Number: Not listed.

Drug Enforcement Administration (DEA). List 1 & 2 Exempt Chemical Mixtures (21 CFR 1310.12(c)): Not regulated.

DEA Exempt Chemical Mixtures Code Number: Not regulated.

Food and Drug Administration (FDA): Total food additive
Direct food additive
GRAS food additive

US state regulations: California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

US. Massachusetts RTK - Substance List: Not regulated.

US. New Jersey Worker and Community Right-to-Know Act: Not regulated.

US. Pennsylvania RTK - Hazardous Substances: Not regulated.

US. Rhode Island RTK: Not regulated. US.

California Proposition 65

US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance: Not listed.

International Inventories

Country(s) or region	Inventory Name	On Inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).



SECTION 16 <i>ADDITIONAL INFORMATION</i>

No representations or warranties, either expressed or implied, of merchant ability, fitness for a particular purpose or any other nature are made hereunder with respect to information or the product to which information refers.

Date: 1/14/2025
Phoenix Products Company