

## Section 1 Identification

Page E1 of E2

**INNOVATING SCIENCE**® by Aldon  
"Cutting edge science for the classroom"  
221 Rochester Street  
Avon, NY 14414-9409  
(585) 226-6177

**CHEMTREC 24 Hour Emergency**  
**Phone Number (800) 424-9300**  
For laboratory and industrial use only.  
Not for drug, food or household use.

|          |                         |
|----------|-------------------------|
| Product  | SODIUM CHLORIDE         |
| Synonyms | Common Salt / Rock Salt |

## Section 2 Hazards identification

This substance or mixture has not been classified as hazardous according to the Globally Harmonized System (GHS) of Classification and Labeling of Chemicals.

Signal word: Not classified

Pictograms: Not classified

Target organs: None known

GHS Classification: Not classified

GHS Label information: Hazard statement(s): Not classified

Precautionary statement(s): Not classified

## Supplementary information:

Do not breathe dust. Do not get in eyes, on skin, or on clothing. Wear protective gloves/protective clothing/eye protection/face protection. Wash hands thoroughly after handling. Get medical attention if you feel unwell.

## Hazards not otherwise classified:

Health hazards not otherwise classified (HHNOC) - Not Known

Physical hazards not otherwise classified (PHNOC) - Not Known

## Section 3 Composition / information on ingredients

| Chemical Name   | CAS #     | %    | EINECS    |
|-----------------|-----------|------|-----------|
| Sodium chloride | 7647-14-5 | 100% | 231-598-3 |

## Section 4 First aid measures

**INGESTION:** Call physician or Poison Control Center immediately. Induce vomiting only if advised by appropriate medical personnel. Never give anything by mouth to an unconscious person.

**INHALATION:** Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

**EYE CONTACT:** Check for and remove contact lenses. Flush thoroughly with water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get immediate medical attention.

**SKIN ABSORPTION:** Remove contaminated clothing. Flush thoroughly with mild soap and water. If irritation occurs, get medical attention.

## Section 5 Fire fighting measures

**Suitable Extinguishing Media:** Use any media suitable for extinguishing supporting fire.

**Protective Actions for Fire-fighters:** In fire conditions, wear a NIOSH/MSHA-approved self-contained breathing apparatus and full protective gear. Use water spray to keep fire-exposed containers cool.

**Specific Hazards:** During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

## Section 6 Accidental release measures

**Personal Precautions:** Evacuate personnel to safe area. Use proper personal protective equipment as indicated in Section 8. Provide adequate ventilation.

**Environmental Precautions:** Avoid runoff into storm sewers and ditches which lead to waterways.

**Containment and Cleanup:** Sweep or vacuum up and place in a suitable container for proper disposal. Wash spill area with soap and water.

**Precautions for Safe Handling:** Read label on container before using. Do not wear contact lenses when working with chemicals. Keep out of reach of children. Avoid contact with eyes, skin and clothing. Do not inhale dusts. Use with adequate ventilation. Avoid ingestion. Wash thoroughly after handling. Remove and wash clothing before reuse.

**Conditions for Safe Storage:** Store in a cool, dry, well-ventilated area away from incompatible substances. Store away from acids.

**Section 8 Exposure controls / personal protection**

| Exposure Limits: | Chemical Name   | ACGIH (TLV)      | OSHA (PEL)       | NIOSH (REL)      |
|------------------|-----------------|------------------|------------------|------------------|
|                  | Sodium chloride | None established | None established | None established |

**Engineering controls:** Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower and fire extinguishing material. Personnel should wear safety glasses, goggles, or faceshield, lab coat or apron, appropriate protective gloves. Use adequate ventilation to keep airborne concentrations low.

**Respiratory protection:** None should be needed in normal laboratory handling at room temperatures. If dusty conditions prevail, work in fume hood or wear a NIOSH/MSHA-approved respirator.

**Section 9 Physical and chemical properties**

|                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                               |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Appearance:</b> Solid, white crystals.<br><b>Odor:</b> No odor.<br><b>Odor threshold:</b> Data not available.<br><b>pH:</b> 4.0-9.0<br><b>Melting / Freezing point:</b> 801°C (>1473°F)<br><b>Boiling point:</b> 1465°C (2669°F)<br><b>Flash point:</b> Non combustible | <b>Evaporation rate ( = 1):</b> Data not available<br><b>Flammability (solid/gas):</b> Data not available.<br><b>Explosion limits: Lower / Upper:</b> Data not available<br><b>Vapor pressure (mm Hg):</b> 2.4<br><b>Vapor density (Air = 1):</b> Data not available<br><b>Relative density (Specific gravity):</b> 2.16 @ 25°C<br><b>Solubility(ies):</b> 1 g/2.8 ml water at 25°C | <b>Partition coefficient:</b> Data not available<br><b>Auto-ignition temperature:</b> Data not available<br><b>Decomposition temperature:</b> Data not available<br><b>Viscosity:</b> Data not available.<br><b>Molecular formula:</b> NaCl<br><b>Molecular weight:</b> 58.45 |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

**Section 10 Stability and reactivity**

**Chemical stability:** Stable **Hazardous polymerization:** Will not occur.

**Conditions to avoid:** Wet conditions can cause caking and/or corrosion.

**Incompatible materials:** Strong acids.

**Hazardous decomposition products:** Electrolysis can produce chlorine gas.

**Section 11 Toxicological information**

**Acute toxicity:** Oral-rat LD50: 3000 mg/kg  
**Skin corrosion/irritation:** Data not available  
**Serious eye damage/irritation:** Data not available  
**Respiratory or skin sensitization:** Data not available  
**Germ cell mutagenicity:** Data not available  
**Carcinogenicity:** Data not available  
NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.  
IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.  
OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.  
Ca Prop 65: This product does not contain any chemicals known to the State of California to cause cancer or reproductive toxicity.  
**Reproductive toxicity:** Data not available  
**STOT-single exposure:** Data not available  
**STOT-repeated exposure:** Data not available  
**Aspiration hazard:** Data not available  
**Potential health effects:**  
Inhalation: Inhalation of dust leaves salty taste with mild irritation to mucous membrane in nose and throat.  
Ingestion: Ingestion of large amounts (more than 0.1 pound) may cause vomiting.  
Skin: Contact may cause very slight irritation.  
Eyes: Contact may cause very slight irritation.  
**Signs and symptoms of exposure:** Gross overexposure over a long period of time, results in dehydration.  
**Additional information:** RTECS #: VZ4725000

**Section 12 Ecological information**

**Toxicity to fish:** Lepomis macrochirus (fish, freshwater) LC50: 9,675 mg/l/96 hours  
**Toxicity to daphnia and other aquatic invertebrates:** Daphnia magna (Crustacea) EC50: 6,175 mg/l/16 hours  
**Toxicity to algae:** Anabaena variabilis (Algae) LC50: 23,565 mg/l/4 day  
**Persistence and degradability:** No data available **Bioaccumulative potential:** No data available  
**Mobility in soil:** No data available **PBT and vPvB assessment:** No data available  
**Other adverse effects:** An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

**Section 13 Disposal considerations**

These disposal guidelines are intended for the disposal of catalog-size quantities only. Federal regulations may apply to empty container. State and/or local regulations may be different. Dispose of in accordance with all local, state and federal regulations or contract with a licensed chemical disposal agency.

**Section 14 Transport information**

|                                     |                                        |                                |                             |
|-------------------------------------|----------------------------------------|--------------------------------|-----------------------------|
| <b>UN/NA number:</b> Not applicable | <b>Shipping name:</b> Not Regulated    | <b>Reportable Quantity:</b> No | <b>Marine pollutant:</b> No |
| <b>Hazard class:</b> Not applicable | <b>Packing group:</b> Not applicable   |                                |                             |
| <b>Exceptions:</b> Not applicable   | <b>2024 ERG Guide #</b> Not applicable |                                |                             |

**Section 15 Regulatory information**

A chemical is considered to be listed if the CAS number for the anhydrous form is on the Inventory list.

| Component       | TSCA   | CERCLA (RQ) | RCRA code  | DSL    | NDSL       | CA Prop 65                                                                                                             |
|-----------------|--------|-------------|------------|--------|------------|------------------------------------------------------------------------------------------------------------------------|
| Sodium chloride | Listed | Not listed  | Not listed | Listed | Not listed | This product does not contain any chemicals known to the State of California to cause cancer or reproductive toxicity. |

**Section 16 Other information**

The information contained herein is furnished without warranty of any kind. Employers should use this information only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees. NTP: National Toxicology Program, IARC: International Agency for Research on Cancer, OSHA: Occupational Safety and Health Administration, STOT: Specific Target Organ Toxicity, SE: Single Exposure, RE: Repeated Exposure, ERG: Emergency Response Guidebook.

## Section 1 Identification

Page E1 of E2

**INNOVATING SCIENCE**® by Aldon  
"Cutting edge science for the classroom"  
221 Rochester Street  
Avon, NY 14414-9409  
(585) 226-6177

**CHEMTREC 24 Hour Emergency  
Phone Number (800) 424-9300**  
For laboratory and industrial use only.  
Not for drug, food or household use.

|                 |                                        |
|-----------------|----------------------------------------|
| <b>Product</b>  | <b>MAGNESIUM CHLORIDE, HEXAHYDRATE</b> |
| <b>Synonyms</b> | Magnesium Chloride, 6-Hydrate          |

## Section 2 Hazards identification

**Signal word:** WARNING

**Pictograms:** No symbol required

**Target organs:** Central nervous system, Kidneys, Gastrointestinal tract

**GHS Classification:**

Acute toxicity, oral (Category 5)

**GHS Label information: Hazard statement:**

H303: May be harmful if swallowed.

**Precautionary statement:**

P312: Call a POISON CENTER or doctor if you feel unwell.

**Hazards not otherwise classified:**

Health hazards not otherwise classified (HHNOC) - Not Known

Physical hazards not otherwise classified (PHNOC) - Not Known

## Section 3 Composition / information on ingredients

| Chemical Name                   | CAS #     | %    | EINECS              |
|---------------------------------|-----------|------|---------------------|
| Magnesium chloride, hexahydrate | 7791-18-6 | 100% | 232-094-6 anhydrous |

## Section 4 First aid measures

**INGESTION:** MAY BE HARMFUL IF SWALLOWED. Call physician or Poison Control Center immediately. Induce vomiting only if advised by appropriate medical personnel. Never give anything by mouth to an unconscious person.

**INHALATION:** Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

**EYE CONTACT:** Check for and remove contact lenses. Flush thoroughly with water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get immediate medical attention.

**SKIN ABSORPTION:** Remove contaminated clothing. Flush thoroughly with mild soap and water. If irritation occurs, get medical attention.

## Section 5 Fire fighting measures

**Suitable Extinguishing Media:** Carbon dioxide, dry chemical, dry sand, alcohol foam.

**Protective Actions for Fire-fighters:** In fire conditions, wear a NIOSH/MSHA-approved self-contained breathing apparatus and full protective gear. Use water spray to keep fire-exposed containers cool.

**Specific Hazards:** During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

## Section 6 Accidental release measures

**Personal Precautions:** Evacuate personnel to safe area. Use proper personal protective equipment as indicated in Section 8. Provide adequate ventilation.

**Environmental Precautions:** Avoid runoff into storm sewers and ditches which lead to waterways.

**Containment and Cleanup:** Recover for reuse if not contaminated. Sweep or vacuum up and place in a suitable container for proper disposal. Wash spill area with soap and water.

**Precautions for Safe Handling:** Read label on container before using. Do not wear contact lenses when working with chemicals. Keep out of reach of children. Avoid contact with eyes, skin and clothing. Do not inhale dusts. Use with adequate ventilation. Avoid ingestion. Wash thoroughly after handling. Remove and wash clothing before reuse.

**Conditions for Safe Storage:** Store in a cool, dry, well-ventilated area away from incompatible substances. Avoid high humidity and moisture.

**Section 8 Exposure controls / personal protection**

| Exposure Limits: | Chemical Name      | ACGIH (TLV)     | OSHA (PEL)      | NIOSH (REL)     |
|------------------|--------------------|-----------------|-----------------|-----------------|
|                  | Magnesium chloride | Not established | Not established | Not established |

**Engineering controls:** Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower and fire extinguishing material. Personnel should wear safety glasses, goggles, or faceshield, lab coat or apron, appropriate protective gloves. Use adequate ventilation to keep airborne concentrations low.

**Respiratory protection:** None should be needed in normal laboratory handling at room temperatures. If dusty conditions prevail, work in fume hood or wear a NIOSH/MSHA-approved respirator.

**Section 9 Physical and chemical properties**

|                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                               |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Appearance:</b> Solid. Colorless, flakes or crystals<br><b>Odor:</b> No odor.<br><b>Odor threshold:</b> Data not available<br><b>pH:</b> 7.0 (aqueous solution)<br><b>Melting / Freezing point:</b> 118°C (244°F)<br><b>Boiling point:</b> Data not available<br><b>Flash point:</b> Non flammable | <b>Evaporation rate ( = 1):</b> Data not available<br><b>Flammability (solid/gas):</b> Data not available<br><b>Explosion limits: Lower / Upper:</b> Not applicable<br><b>Vapor pressure (mm Hg):</b> Data not available<br><b>Vapor density (Air = 1):</b> Data not available<br><b>Relative density (Specific gravity):</b> 1.57<br><b>Solubility(ies):</b> 167 g/100 ml water @ 20°C | <b>Partition coefficient:</b> Data not available<br><b>Auto-ignition temperature:</b> Data not available<br><b>Decomposition temperature:</b> Data not available<br><b>Viscosity:</b> Data not available<br><b>Molecular formula:</b> MgCl <sub>2</sub> •6H <sub>2</sub> O<br><b>Molecular weight:</b> 203.31 |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

**Section 10 Stability and reactivity**

**Chemical stability:** Stable **Hazardous polymerization:** Will not occur.

**Conditions to avoid:** Excessive temperatures and heat. Avoid high humidity and moisture.

**Incompatible materials:** Strong oxidizers.

**Hazardous decomposition products:** Hydrogen chloride gas, magnesium oxide.

**Section 11 Toxicological information**

**Acute toxicity:** Oral-rat LD50: 2800 mg/kg (anhydrous)

**Skin corrosion/irritation:** Data not available

**Serious eye damage/irritation:** Data not available

**Respiratory or skin sensitization:** Data not available

**Germ cell mutagenicity:** Data not available

**Carcinogenicity:** Data not available

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Ca Prop 65: This product does not contain any chemicals known to the State of California to cause cancer or reproductive toxicity.

**Reproductive toxicity:** Data not available

**STOT-single exposure:** Data not available

**STOT-repeated exposure:** Data not available

**Aspiration hazard:** Data not available

**Potential health effects:**

Inhalation: Inhalation may cause mild irritation to the mucous membranes.

Ingestion: Ingestion may cause abdominal pain, vomiting and diarrhea.

Skin: Contact may cause mechanical irritation.

Eyes: Contact may cause mechanical irritation.

**Signs and symptoms of exposure:** Exercise appropriate procedures to minimize potential hazards.

**Additional information:** RTECS #: OM2975000

**Section 12 Ecological information**

**Toxicity to fish:** Gambusia affinis (fish, fresh water), LC50 = 16,500 mg/L/96 hours

**Toxicity to daphnia and other aquatic invertebrates:** Daphnia magna (Crustacea), EC50 = 3,190 mg/L/24 hours

**Toxicity to algae:** Scenedesmus subspicatus (Algae), EC50 = 2,200 mg/L/72 hours

**Persistence and degradability:** No data available

**Bioaccumulative potential:** No data available

**Mobility in soil:** No data available

**PBT and vPvB assessment:** No data available

**Other adverse effects:** An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

**Section 13 Disposal considerations**

These disposal guidelines are intended for the disposal of catalog-size quantities only. Federal regulations may apply to empty container. State and/or local regulations may be different. Dispose of in accordance with all local, state and federal regulations or contract with a licensed chemical disposal agency.

**Section 14 Transport information**

**UN/NA number:** Not applicable

**Shipping name:** Not Regulated

**Hazard class:** Not applicable

**Packing group:** Not applicable

**Reportable Quantity:** No

**Marine pollutant:** No

**Exceptions:** Not applicable

**2024 ERG Guide #** Not applicable

**Section 15 Regulatory information**

A chemical is considered to be listed if the CAS number for the anhydrous form is on the Inventory list.

| Component                       | TSCA       | CERCLA (RQ) | RCRA code  | DSL        | NDSL       | CA Prop 65                                                                                                             |
|---------------------------------|------------|-------------|------------|------------|------------|------------------------------------------------------------------------------------------------------------------------|
| Magnesium chloride, hexahydrate | Not listed | Not listed  | Not listed | Not listed | Not listed | This product does not contain any chemicals known to the State of California to cause cancer or reproductive toxicity. |

**Section 16 Other information**

The information contained herein is furnished without warranty of any kind. Employers should use this information only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees. NTP: National Toxicology Program, IARC: International Agency for Research on Cancer, OSHA: Occupational Safety and Health Administration, STOT: Specific Target Organ Toxicity, SE: Single Exposure, RE: Repeated Exposure, ERG: Emergency Response Guidebook.

## Section 1 Identification

Page E1 of E2

**INNOVATING SCIENCE**® by Aldon  
"Cutting edge science for the classroom"  
221 Rochester Street  
Avon, NY 14414-9409  
(585) 226-6177

**CHEMTREC 24 Hour Emergency**  
**Phone Number (800) 424-9300**  
For laboratory and industrial use only.  
Not for drug, food or household use.

|          |                             |
|----------|-----------------------------|
| Product  | CALCIUM CHLORIDE, DIHYDRATE |
| Synonyms | Calcium Chloride, Hydrated  |

## Section 2 Hazards identification

Signal word: WARNING

Pictograms: GHS07

Target organs: None known



## GHS Classification:

Acute toxicity (Oral) (Category 4)

Eye irritation (Category 2A)

STOT-SE (Category 3)

## GHS Label information: Hazard statement:

H302: Harmful if swallowed.

H319: Causes serious eye irritation.

H335: May cause respiratory irritation.

## Precautionary statement:

P261: Avoid breathing dust.

P264: Wash hands thoroughly after handling.

P270: Do not eat, drink or smoke when using this product.

P271: Use only outdoors or in a well-ventilated area.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

P301+P312: IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell.

P304+P340: IF INHALED: Remove person to fresh air and keep in a position comfortable for breathing.

P305+P351+P338: IF IN EYES: Rinse cautiously with water for 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P312: Call a POISON CENTER or doctor if you feel unwell.

P330: Rinse mouth.

P337+P313: If eye irritation persists: Get medical attention.

P403+P233: Store in a well-ventilated place. Keep container tightly closed.

P405: Store locked up.

P501: Dispose of contents/container to a licensed chemical disposal agency in accordance with local/regional/national regulations.

## Hazards not otherwise classified:

Health hazards not otherwise classified (HHNOC) - Not Known

Physical hazards not otherwise classified (PHNOC) - Not Known

## Section 3 Composition / information on ingredients

| Chemical Name               | CAS #      | %      | EINECS    |
|-----------------------------|------------|--------|-----------|
| Calcium chloride, dihydrate | 10035-04-8 | 98-100 | 233-140-8 |

## Section 4 First aid measures

**INGESTION:** HARMFUL IF SWALLOWED. Call physician or Poison Control Center immediately. Induce vomiting only if advised by appropriate medical personnel. Never give anything by mouth to an unconscious person.

**INHALATION:** MAY CAUSE RESPIRATORY IRRITATION. Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

**EYE CONTACT:** CAUSES SERIOUS EYE IRRITATION. Check for and remove contact lenses. Flush thoroughly with water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get immediate medical attention.

**SKIN ABSORPTION:** MAY CAUSE IRRITATION. Remove contaminated clothing. Flush thoroughly with mild soap and water. If irritation occurs, get medical attention.

## Section 5 Fire fighting measures

**Suitable Extinguishing Media:** Use any media suitable for extinguishing supporting fire.

**Protective Actions for Fire-fighters:** In fire conditions, wear a NIOSH/MSHA-approved self-contained breathing apparatus and full protective gear. Use water spray to keep fire-exposed containers cool.

**Specific Hazards:** During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Heat is generated when product mixes with water.

## Section 6 Accidental release measures

**Personal Precautions:** Evacuate personnel to safe area. Use proper personal protective equipment as indicated in Section 8. Provide adequate ventilation.

**Environmental Precautions:** Avoid runoff into storm sewers and ditches which lead to waterways.

**Containment and Cleanup:** Sweep or vacuum up and place in a suitable container for proper disposal. Wash spill area with soap and water.

**Precautions for Safe Handling:** Read label on container before using. Do not wear contact lenses when working with chemicals. Keep out of reach of children. Avoid contact with eyes, skin and clothing. Do not inhale dusts. Use with adequate ventilation. Avoid ingestion. Wash thoroughly after handling. Remove and wash clothing before reuse.

**Conditions for Safe Storage:** Hygroscopic material. Store in a cool, dry, well-ventilated area away from incompatible substances.

**Section 8 Exposure controls / personal protection**

| Exposure Limits: | Chemical Name              | ACGIH (TLV)      | OSHA (PEL)                           | NIOSH (REL)      |
|------------------|----------------------------|------------------|--------------------------------------|------------------|
|                  | Calcium Chloride Dihydrate | None established | TWA: 15 mg/m <sup>3</sup> total dust | None established |

**Engineering controls:** Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower and fire extinguishing material. Personnel should wear safety glasses, goggles, or faceshield, lab coat or apron, appropriate protective gloves. Use adequate ventilation to keep airborne concentrations low.

**Respiratory protection:** None should be needed in normal laboratory handling at room temperatures. If dusty conditions prevail, work in fume hood or wear a NIOSH/MSHA-approved respirator.

**Section 9 Physical and chemical properties**

|                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                           |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Appearance:</b> Solid. White powder.<br><b>Odor:</b> No odor.<br><b>Odor threshold:</b> Data not available.<br><b>pH:</b> Data not available.<br><b>Melting / Freezing point:</b> 175°C (347°F)<br><b>Boiling point:</b> Data not available<br><b>Flash point:</b> Not applicable | <b>Evaporation rate ( = 1):</b> Not applicable<br><b>Flammability (solid/gas):</b> Data not available.<br><b>Explosion limits: Lower / Upper:</b> Not applicable<br><b>Vapor pressure (mm Hg):</b> Negligible<br><b>Vapor density (Air = 1):</b> Data not available<br><b>Relative density (Specific gravity):</b> 0.84 (20°C)<br><b>Solubility(ies):</b> Soluble in water. | <b>Partition coefficient:</b> Not applicable<br><b>Auto-ignition temperature:</b> Not applicable<br><b>Decomposition temperature:</b> Data not available.<br><b>Viscosity:</b> Data not available.<br><b>Molecular formula:</b> CaCl <sub>2</sub> · 2 H <sub>2</sub> O<br><b>Molecular weight:</b> 147.01 |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

**Section 10 Stability and reactivity**

**Chemical stability:** Stable **Hazardous polymerization:** Will not occur.

**Conditions to avoid:** Hygroscopic material. Avoid moisture.

**Incompatible materials:** Heat is generated when mixed with water. Spattering and boiling can occur. Avoid contact with sulfuric acid. Corrosive when wet. Flammable hydrogen may be generated from contact with metals such as zinc and sodium.

**Hazardous decomposition products:** None known.

**Section 11 Toxicological information**

**Acute toxicity:** Oral-rat LD50: 1000 mg/kg  
**Skin corrosion/irritation:** Causes mild skin irritation  
**Serious eye damage/irritation:** Causes eye irritation  
**Respiratory or skin sensitization:** Not a skin sensitizer  
**Germ cell mutagenicity:** Data not available  
**Carcinogenicity:** Data not available  
NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.  
IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.  
OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.  
Ca Prop 65: This product does not contain any chemicals known to the State of California to cause cancer or reproductive toxicity.  
**Reproductive toxicity:** Data not available  
**STOT-single exposure:** Respiratory tract irritation  
**STOT-repeated exposure:** Data not available  
**Aspiration hazard:** Data not available  
**Potential health effects:**  
Inhalation: Dust may cause irritation to the upper respiratory tract (nose and throat).  
Ingestion: Low toxicity if swallowed. However, large amounts may result in gastrointestinal irritation or ulceration.  
Skin: Contact with skin may cause irritation and/or defatting on prolonged contact.  
Eyes: Contact with eyes may cause severe irritation and/or corneal injury.  
**Signs and symptoms of exposure:** See Potential health effects above.  
**Additional information:** RTECS #: EV9810000

**Section 12 Ecological information**

**Toxicity to fish:** Lepomis macrochirus (bluegill) LC50: 8,350-10,650 mg/L  
**Toxicity to daphnia and other aquatic invertebrates:** Daphnia magna (water flea), LC50: 759-3,005 mg/L  
**Toxicity to algae:** No data available  
**Persistence and degradability:** Does not biodegrade readily **Bioaccumulative potential:** No data available  
**Mobility in soil:** Very high mobility in soil. It does not absorb to most soil types **PBT and vPvB assessment:** No data available  
**Other adverse effects:** An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

**Section 13 Disposal considerations**

These disposal guidelines are intended for the disposal of catalog-size quantities only. Federal regulations may apply to empty container. State and/or local regulations may be different. Dispose of in accordance with all local, state and federal regulations or contract with a licensed chemical disposal agency.

**Section 14 Transport information**

**UN/NA number:** Not applicable **Shipping name:** Not Regulated  
**Hazard class:** Not applicable **Packing group:** Not applicable **Reportable Quantity:** No **Marine pollutant:** No  
**Exceptions:** Not applicable **2024 ERG Guide #** Not applicable

**Section 15 Regulatory information**

A chemical is considered to be listed if the CAS number for the anhydrous form is on the Inventory list.

| Component                  | TSCA   | CERCLA (RQ) | RCRA code  | DSL    | NDSL       | CA Prop 65                                                                                                             |
|----------------------------|--------|-------------|------------|--------|------------|------------------------------------------------------------------------------------------------------------------------|
| Calcium chloride dihydrate | Listed | Not listed  | Not listed | Listed | Not listed | This product does not contain any chemicals known to the State of California to cause cancer or reproductive toxicity. |

**Section 16 Other information**

The information contained herein is furnished without warranty of any kind. Employers should use this information only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees. NTP: National Toxicology Program, IARC: International Agency for Research on Cancer, OSHA: Occupational Safety and Health Administration, STOT: Specific Target Organ Toxicity, SE: Single Exposure, RE: Repeated Exposure, ERG: Emergency Response Guidebook.