# Safety data sheet

ChemiPURE Calcium Chloride Dihydrate, ≥99%

| | |
|---|---|
| Product name<br>ChemiPURE Calcium Chloride Dihydrate, ≥99% | Catalog no.<br>CCL205, CCL210 |
| Synonyms<br>Calcium chloride dihydrate; calcium dichloride dihydrate | SDS revision<br>- |
| CAS no.<br>10035-04-8 | Format version / date<br>3 / 25 October 2026 |

## 01 PRODUCT AND COMPANY IDENTIFICATION

| | |
|---|---|
| Product identifier | ChemiPURE Calcium Chloride Dihydrate, ≥99% |
| Product code | CCL205 (500 g); CCL210 (1 kg) |
| CAS number | 10035-04-8 |
| EC number | 640-414-4 |
| Recommended use | For research use only. Laboratory reagent for biochemical, molecular biology, analytical and buffer preparation applications. |
| Supplier | EcoTech Biotechnology |
| Website | www.ecotechbiotech.com |
| Address | Universite Mah. İpekyolu Cad. Ata Teknokent Sitesi B Blok No: Z10, Yakutiye, Erzurum, Türkiye |
| Telephone | 0090 544 327 34 97 |
| SDS contact | info@ecotechbiotech.com |
| Emergency telephone | 0090 544 327 34 97 |
| Available | Monday-Saturday/08:00-20:00/GMT+3 |
| Languages | Turkish/English |
| Outside these hours | Contact: info@ecotechbiotech.com |

## 02 HAZARDS IDENTIFICATION

| | |
|---|---|
| Classification | Serious eye damage / eye irritation, Category 2 (Eye Irrit. 2), H319, according to Regulation (EC) No. 1272/2008 (CLP). |
| Label elements | GHS07; signal word: Warning. |
| Symbols / pictograms |  |
| Signal word | Warning |
| Hazard statements | H319 - Causes serious eye irritation. |
| Precautionary statements - Prevention | P264 - Wash thoroughly after handling. P280 - Wear eye protection / face protection. Avoid breathing dust. |
| Precautionary statements - Response | 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. |
| Other hazards | Hygroscopic solid. Dust may irritate the respiratory tract. Avoid moisture uptake and dust generation. |

# Composition & response

ChemiPURE Calcium Chloride Dihydrate, ≥99% | SAFETY DATA SHEET / SECTIONS 03-05

## 03 COMPOSITION / INFORMATION ON INGREDIENTS

| | |
|---|---|
| Product name | ChemiPURE Calcium Chloride Dihydrate, ≥99% |
| Synonyms | Calcium dichloride dihydrate; calcium chloride 2-hydrate |
| Concentration | ≥99% (purity) |
| Formula | $CaCl_2 \cdot 2H_2O$ |
| Molecular weight | 147.02 g/mol |
| Mixture statement | Substance: calcium chloride dihydrate (CAS 10035-04-8; EC/List 640-414-4), purity ≥99%. The identity and concentration of residual impurities are not available. |

## 04 FIRST AID MEASURES

### 4.1 Description of first aid measures

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| Eye contact | Immediately rinse cautiously with water for at least 15 minutes, holding eyelids open. Remove contact lenses if easy to do. Obtain medical attention, particularly if irritation continues. |
| Skin contact | Wash exposed skin with plenty of water. Remove contaminated clothing. Seek medical attention if irritation persists. |
| Inhalation | Move to fresh air. Seek medical advice if coughing, irritation or breathing discomfort occurs. |
| Ingestion | Rinse mouth with water. Do not induce vomiting. Seek medical advice if unwell. Never give anything by mouth to an unconscious person. |
| Self-protection of first aider | Avoid direct exposure to dust and use appropriate gloves, eye protection and protective clothing. |
| Most important symptoms / effects | Eye irritation, including redness, watering and discomfort; dust may irritate the respiratory tract. |
| Notes to physicians | Treat symptomatically. |

## 05 FIREFIGHTING MEASURES

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|---|---|
| Suitable extinguishing media | Non-combustible substance. Select water spray, carbon dioxide, dry powder or foam suitable for the surrounding fire. |
| Unsuitable extinguishing media | No specific unsuitable media identified. Use extinguishing methods suitable for surrounding materials. |
| Special hazards arising from the substance or mixture | On strong heating or combustion in a fire, decomposition may release irritating or corrosive fumes including hydrogen chloride. |
| Explosion data | Not classified as explosive. No specific explosion hazard under normal storage and handling. |
| Advice for firefighters | Wear appropriate protective clothing and self-contained breathing apparatus when fighting a fire. |

# Safe use & protection

ChemiPURE Calcium Chloride Dihydrate, ≥99% | SAFETY DATA SHEET / SECTIONS 06-08

## 06 ACCIDENTAL RELEASE MEASURES

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| Personal precautions, protective equipment and emergency procedures | Ensure adequate ventilation. Wear suitable gloves, protective clothing and safety goggles. Avoid dust formation and inhalation. |
| Environmental precautions | Prevent unnecessary release to drains, soil and surface water. |
| Methods and materials for containment and cleaning up | Sweep or collect mechanically without creating dust. Place material in a suitable dry, closed and labelled container for disposal. |
| Reference to other sections | See Sections 8 and 13 for protective equipment and disposal procedures. |

## 07 HANDLING AND STORAGE

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|---|---|
| Precautions for safe handling | Avoid contact with eyes and inhalation of dust. Use adequate ventilation and appropriate protective equipment. Wash hands thoroughly after handling. |
| Conditions for safe storage | Store at 15–25 °C in a dry, well-ventilated area in a tightly closed container. Hygroscopic: protect from moisture and incompatible substances. |
| Container labeling | Keep in the original or a correctly labelled, tightly sealed container. |

## 08 EXPOSURE CONTROLS / PERSONAL PROTECTION

### 8.1 Control parameters

Occupational exposure values for respirable and inhalable dust may apply. Maintain dust levels as low as reasonably practicable and follow applicable local limits.

### 8.2 Exposure controls

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| Engineering measures | Provide adequate general ventilation and local extraction if dust is produced; ensure access to an eyewash station. |
| Hygiene measures | Follow standard laboratory hygiene. Do not eat, drink or smoke while handling; wash hands after use. |
| Eye / face protection | Wear splash-resistant safety goggles or eye protection compliant with EN 166. |
| Hand protection | Use compatible chemical-resistant protective gloves; inspect before use. |
| Skin and body protection | Wear laboratory coat, long trousers and closed footwear. |
| Respiratory protection | Not normally required for small-scale handling with adequate ventilation. Use suitable particulate respiratory protection when dust exposure is possible. |

# Material properties

ChemiPURE Calcium Chloride Dihydrate, ≥99% | SAFETY DATA SHEET / SECTIONS 09-10

## 09 PHYSICAL AND CHEMICAL PROPERTIES

**Information on basic physical and chemical properties**

| | |
|---|---|
| Appearance | White crystalline powder (solid) |
| Odor | Odorless |
| Odor threshold | Not applicable / No data available |
| pH | Approximately 4.5–6.5 (100 g/L aqueous solution) |
| Melting point / freezing point | Approximately 175 °C |
| Initial boiling point and boiling range | No data available |
| Flash point | Not applicable (non-combustible solid) |
| Evaporation rate | Not applicable (solid) |
| Flammability (solid, gas) | Not classified as flammable; non-combustible solid |
| Upper / lower flammability or explosive limits | Not applicable / No data available |
| Vapor pressure | No data available |
| Vapor density | Not applicable (solid) |
| Relative density | No verified product-specific value available |
| Solubility(ies) | Very soluble in water; approximately 1000 g/L at 0 °C |
| Partition coefficient: n-octanol / water | Not applicable to an inorganic ionic salt |
| Auto-ignition temperature | Not applicable |
| Decomposition temperature | No data available |
| Viscosity | Not applicable (solid) |
| Explosive properties | Not classified as explosive |
| Oxidizing properties | Not classified as oxidizing |

## 10 STABILITY AND REACTIVITY

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|---|---|
| Reactivity | No hazardous reactivity known under normal conditions of handling and use. |
| Chemical stability | Hygroscopic; stable when stored dry in a tightly closed container at 15–25 °C. |
| Possibility of hazardous reactions | No hazardous reactions expected under recommended handling and storage conditions. |
| Conditions to avoid | Exposure to moisture and humid air, excessive heat and dust formation. |
| Incompatible materials | Strong oxidizing agents. |
| Hazardous decomposition products | Hydrogen chloride may be released on severe heating or decomposition. |

# Health & environment

ChemiPURE Calcium Chloride Dihydrate, ≥99% | SAFETY DATA SHEET / SECTIONS 11-13

## 11 TOXICOLOGICAL INFORMATION

### 11.1 Information on toxicological effects

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|---|---|
| Acute toxicity | Not classified for acute toxicity based on available data. |
| Skin corrosion / irritation | Not classified for skin irritation; dust and prolonged contact may cause discomfort. |
| Serious eye damage / eye irritation | Eye Irrit. 2, H319: Causes serious eye irritation. |
| Carcinogenicity | Not classified as carcinogenic based on available data. |
| Reproductive toxicity | Not classified for reproductive toxicity based on available data. |
| STOT - SE | Not classified based on available data. |
| STOT - RE | Not classified based on available data. |
| Aspiration hazard | Not applicable (solid). |

### 11.2 Potential health effects

Ingestion: May cause gastrointestinal discomfort if swallowed in significant quantities.
Inhalation: Dust may irritate the nose and respiratory tract.
Skin: Prolonged contact may cause local irritation.
Eyes: Causes serious eye irritation (H319).

### 11.3 Additional information

No additional product-specific toxicological data are available.

## 12 ECOLOGICAL INFORMATION

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|---|---|
| Ecotoxicity | Not classified as hazardous to the aquatic environment under CLP. Avoid discharge to drains or surface water. |
| Persistence and degradability | Inorganic salt; conventional biodegradation testing is not applicable. Dissociates into calcium and chloride ions in water. |
| Bioaccumulative potential | Bioaccumulation is not expected for this inorganic salt. |
| Mobility in soil | Highly water-soluble; dissolved ions may migrate in soil and water. |
| Results of PBT and vPvB assessment | No specific PBT/vPvB assessment data available; criteria are generally not applicable to inorganic substances. |

## 13 DISPOSAL CONSIDERATIONS

### Waste treatment methods

| | |
|---|---|
| Product | Collect and dispose of laboratory chemical waste in accordance with applicable national and local regulations. Do not release large quantities into drains. |
| Contaminated packaging | Dispose of as chemical-contaminated packaging. Recycle only where properly cleaned and permitted by local regulations. |

# Transport & reference

ChemiPURE Calcium Chloride Dihydrate, ≥99% | SAFETY DATA SHEET / SECTIONS 14-16

## 14 TRANSPORT INFORMATION

| Mode | UN no. | UN proper shipping name | Hazard class | Packing group | Environmental hazards |
|---|---|---|---|---|---|
| ADR/RID | - | Not regulated | - | - | No |
| IMDG | - | Not regulated | - | - | No |
| IATA | - | Not regulated | - | - | No |

## 15 REGULATORY INFORMATION

| | |
|---|---|
| Safety, health and environmental regulations / legislation | Regulation (EC) No. 1907/2006 (REACH) and Regulation (EC) No. 1272/2008 (CLP). Calcium chloride dihydrate (CAS 10035-04-8) is classified Eye Irrit. 2 (H319). |
| Environmental hazards | Not classified as environmentally hazardous under CLP. |
| Chemical safety assessment | No product-specific chemical safety assessment is available. |

## 16 OTHER INFORMATION

**Key to abbreviations and acronyms**

| | |
|---|---|
| STOT-SE | Specific Target Organ Toxicity - Single Exposure |
| STOT-RE | Specific Target Organ Toxicity - Repeated Exposure |
| PBT | Persistent Bioaccumulative and Toxic |
| vPvB | very Persistent very Bioaccumulative and toxic |
| ADR | European Agreement concerning the international carriage of Dangerous goods by Road |
| CAS | Chemical Abstracts Service |
| IARC | International Agency for Research on Cancer |
| IATA | International Air Transport Association |
| IMDG | International Maritime code for Dangerous Goods |
| REACH | Registration, Evaluation, Authorization and restriction of Chemicals |
| RID | Regulations concerning the International transport of Dangerous goods by rail |