

**Order
Number**

**Customer
Number**

1. Identification of the substance/preparation and of the company/undertaking

Product name : Calcium Chloride, Dihydrate, Molecular Biology Grade **Catalog #** : 208291
Chemical formula : $\text{CaCl}_2 \cdot 2\text{H}_2\text{O}$ **Supplier** : Manufactured by EMD Biosciences, Inc.
10394 Pacific Center Court
San Diego, CA 92121
(858)450-5558/(800)854-3417
FAX: (858)453-3552
Synonym : Not available.

**Emergency
telephone number** : **Call Chemtrec®**
(800)424-9300 (within U.S.A.)
(703)527-3887 (outside U.S.A.)

2. Composition / information on ingredients

Substance/Preparation : Substance

Chemical name*	CAS No.	EC Number	Symbol	R-Phrases
1) Calcium Chloride, Dihydrate, Molecular Biology Grade	10035-04-8	Not available.	Xi	R36

3. Hazards identification

Physical/chemical hazards : Not applicable.
Human health hazards : CAUTION!
MAY CAUSE EYE IRRITATION.

4. First-aid measures

First-Aid measures

- Inhalation** : If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
- Ingestion** : Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband.
- Skin Contact** : In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Cold water may be used. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention.
- Eye Contact** : Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention.

Effects and symptoms

Eye Contact : Hazardous in case of eye contact (irritant).

Aggravating conditions : Repeated or prolonged exposure is not known to aggravate medical condition.

5. Fire-fighting measures

Flammability of the Product : Non-flammable.

Extinguishing Media

Suitable : Not applicable.

Special fire-fighting procedures : Fire fighters should wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear.

6. Accidental release measures

- Personal precautions** : Splash goggles. Full suit. Boots. Gloves. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.
- Small Spill and Leak** : Use appropriate tools to put the spilled solid in a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.
- Large Spill and Leak** : Use a shovel to put the material into a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system

7. Handling and storage

- Handling** : Do not breathe dust. Avoid contact with eyes. Wear suitable protective clothing. If you feel unwell, seek medical attention and show the label when possible. Keep away from incompatibles such as acids.
- Storage** : Keep container tightly closed. Keep container in a cool, well-ventilated area. Do not store above 20°C (68°F).
- Packaging materials**
- Recommended use** : Use original container.

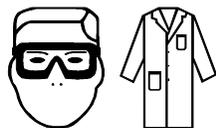
8. Exposure controls/personal protection

- Engineering measures** : Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.
- Hygiene measures** : Wash hands after handling compounds and before eating, smoking, using lavatory, and at the end of day.

<u>Ingredient Name</u>	<u>Occupational Exposure Limits</u>
1) Calcium Chloride, Dihydrate, Molecular Biology Grade	Not available.

Personal protective equipment

- Skin and body** : Lab coat.
- Eyes** : Splash goggles.
- Protective Clothing (Pictograms)** :



9. Physical and chemical properties

- Physical state** : Solid. (Solid powder.)
- Color** : White.
- Molecular Weight** : 147 g/mole
- Solubility** : Easily soluble in cold water.
- Flash point** : Not applicable.
- Explosive properties** : Risks of explosion of the product in presence of mechanical impact: Not available.
Risks of explosion of the product in presence of static discharge: Not available.

10. Stability and reactivity

- Stability** : The product is stable.
- Conditions to avoid** : Not available.
- Materials to avoid** : Reactive with acids.

11. Toxicological information

RTECS # : **EV9810000**

Local effects

Skin irritation : Not available.

Acute toxicity : LD50: Not available.
LC50: Not available.

Chronic toxicity : Repeated or prolonged exposure is not known to aggravate medical condition.

Other Toxic Effects on Humans : Not available.
Not considered to be toxic for humans.

Not available.

Not available.

Specific effects

- Carcinogenic effects** : Classified None. by NIOSH.
- Mutagenic effects** : Not available.
- Reproduction toxicity** : Not available.
- Teratogenic effects** : Not available.

12. Ecological information

- Ecotoxicity** : Not available.
- Toxicity of the Products of Biodegradation** : The product itself and its products of degradation are not toxic.

13. Disposal considerations

- Methods of disposal; Waste of residues; Contaminated packaging** : Waste must be disposed of in accordance with federal, state and local environmental control regulations.

14. Transport information

International transport regulations

Land - Road/Railway

- ADR/RID Class** : Not controlled under ADR (Europe).

Sea

- IMDG Class** : Not controlled under IMDG.

Air

- IATA-DGR Class** : Not controlled under IATA.

- Special Provisions for Transport** : Not applicable.

15. Regulatory information

EU Regulations

Hazard symbol(s) :



- Classification** : Irritant
- Risk Phrases** : R36- Irritating to eyes.
- Safety Phrases** : S22- Do not breathe dust.
S24- Avoid contact with skin.

U.S. Federal Regulations

- TSCA**: No products were found.
- SARA 302/304/311/312 extremely hazardous substances**: No products were found.
- SARA 302/304 emergency planning and notification**: No products were found.
- SARA 302/304/311/312 hazardous chemicals**: Calcium Chloride, Dihydrate, Molecular Biology Grade
- SARA 311/312 MSDS distribution - chemical inventory - hazard identification**: Calcium Chloride, Dihydrate, Molecular Biology Grade: delayed health hazard
- SARA 313 toxic chemical notification and release reporting**: No products were found.
- Clean Water Act (CWA) 307**: No products were found.
- Clean Water Act (CWA) 311**: No products were found.
- Clean air act (CAA) 112 accidental release prevention**: No products were found.
- Clean air act (CAA) 112 regulated flammable substances**: No products were found.
- Clean air act (CAA) 112 regulated toxic substances**: No products were found.

- HCS Classification** : CLASS: Irritating substance.

- State Regulations** :

- WHMIS (Canada)** : Not controlled under WHMIS (Canada).
No products were found.

16. Other information

**Hazardous Material
Information System
(U.S.A.)**

Health	2
Fire Hazard	0
Reactivity	0
Personal Protection	j

**National Fire
Protection
Association (U.S.A.)**



Notice to Reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

Date of issue

Catalog # 208291

3/18/2003.

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