



# Material Safety Data Sheet

## Section 1. Product and Company Identification

<b>Product Name</b>	Calcium Standard, 0.1000M	<b>Product Code</b>	VW5829
<b>Manufacturer</b>	EMD Chemicals Inc. P.O. Box 70 480 Democrat Road Gibbstown, NJ 08027 Prior to January 1, 2003 EMD Chemicals Inc. was EM Industries, Inc. or EM Science, Division of EM Industries, Inc.	<b>Effective Date</b>	9/11/2003
		<b>Print Date</b>	5/3/2004

### For More Information Call

(914) 592-4660  
M-F, 9AM-4:30 PM EST

### In Case of Emergency Call

800-424-9300 CHEMTREC (USA)  
613-996-6666 (Canada)  
24 Hours/Day: 7 Days/Week

**Synonym** None.

**Material Uses** Laboratory Reagent

**Chemical Family** Solution.

## Section 2. Composition and Information on Ingredients

Component	CAS #	% by Weight
Calcium chloride dihydrate	10035-04-8	1-2
Water	7732-18-5	>98

## Section 3. Hazards Identification

**Physical State and Appearance** Liquid.

**Emergency Overview** CAUTION !  
CAUSES EYE IRRITATION.  
MAY CAUSE SKIN IRRITATION.

**Routes of Entry** Dermal contact. Eye contact. Ingestion.

### Potential Acute Health Effects

**Eyes** Hazardous in case of eye contact (irritant). Inflammation of the eye is characterized by redness, watering, and itching.

**Skin** May be hazardous in case of skin contact (irritant). Skin inflammation is characterized by itching, scaling, reddening, or, occasionally, blistering.

**Inhalation** No known acute effects of this product resulting from inhalation.

**Ingestion** Irritating to mouth, throat and stomach. Ingestion can cause nausea and vomiting

### Potential Chronic Health Effects

**Carcinogenic Effects** This material is not known to cause cancer in animals or humans.

Additional information See Toxicological Information (section 11)

**Medical Conditions Aggravated by Overexposure:** Repeated or prolonged exposure is not known to aggravate medical condition.

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**Section 4. First Aid Measures**

<b>Eye Contact</b>	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 immediately.
<b>Skin Contact</b>	In case of contact, immediately flush skin with plenty of water. Cover the irritated skin with an emollient. Remove contaminated clothing and shoes. Cold water may be used. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention.
<b>Inhalation</b>	If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
<b>Ingestion</b>	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.

**Section 5. Fire Fighting Measures**

<b>Flammability of the Product</b>	Non-flammable.
<b>Auto-ignition Temperature</b>	Not applicable.
<b>Flash Points</b>	Not applicable.
<b>Flammable Limits</b>	Not applicable.
<b>Products of Combustion</b>	Not applicable.
<b>Fire Hazards in Presence of Various Substances</b>	Not applicable.
<b>Explosion Hazards in Presence of Various Substances</b>	Risks of explosion of the product in presence of static discharge: No. Risks of explosion of the product in presence of mechanical impact: No.
<b>Fire Fighting Media and Instructions</b>	Not applicable.
<b>Protective Clothing (Fire)</b>	Not applicable.
<b>Special Remarks on Fire Hazards</b>	Not available.
<b>Special Remarks on Explosion Hazards</b>	Not available.

**Section 6. Accidental Release Measures**

<b>Small Spill and Leak</b>	Dilute with water and mop up, or absorb with an inert dry material and place in an appropriate waste disposal container.
<b>Large Spill and Leak</b>	Absorb with an inert material and put the spilled material in an appropriate waste disposal. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system.
<b>Spill Kit Information</b>	No specific spill kit required for this product.

**Section 7. Handling and Storage**

**Handling** Avoid contact with eyes, skin and clothing. Wash thoroughly after handling.

**Storage** Keep container tightly closed. Keep container in a cool, well-ventilated area.

**Section 8. Exposure Controls/Personal Protection**

**Engineering Controls** Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective occupational exposure limits.

**Personal Protection**

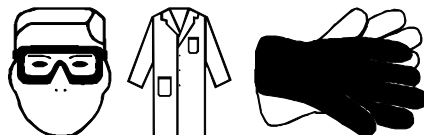
**Eyes** Splash goggles.

**Body** Lab coat.

**Respiratory** Wear appropriate respirator when ventilation is inadequate.

**Hands** Gloves.

**Feet** Not applicable.

**Protective Clothing (Pictograms)**

**Personal Protection in Case of a Large Spill** Splash goggles. Full suit. Boots. Gloves. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

**Product Name****Exposure Limits**

Calcium chloride dihydrate  
Water

Not available.  
Not available.

**Section 9. Physical and Chemical Properties**

**Odor** Odorless.

**Color** Not available.

**Physical State and Appearance** Liquid.

**Molecular Weight** Not applicable.

**Molecular Formula** Not applicable.

**pH** Not available.

**Boiling/Condensation Point** The lowest known value is 99.9°C (211.8°F) (Water).

**Melting/Freezing Point** May start to solidify at -0.1°C (31.8°F) based on data for: Water.

**Specific Gravity** Not available.

**Vapor Pressure** Not available.

**Vapor Density** Not available.

**Odor Threshold** Not available.

**Evaporation Rate** 0.36 (Water) compared to (n-Butyl Acetate =1)

**LogK<sub>ow</sub>** Not available.

**Solubility** Soluble in water.

### Section 10. Stability and Reactivity

**Stability and Reactivity** The product is stable.

**Conditions of Instability** Not available.

**Incompatibility with Various Substances** Reactive with metals.

**Rem/Incompatibility** Not available.

**Hazardous Decomposition Products** Not available.

**Hazardous Polymerization** Will not occur.

### Section 11. Toxicological Information

**RTECS Number:** Calcium Chloride EV9810000  
Water ZC0110000

**Toxicity** LD<sub>50</sub>: Not available.  
LC<sub>50</sub>: Not available.

**Chronic Effects on Humans** Not available.

**Acute Effects on Humans** Hazardous in case of eye contact (irritant). Inflammation of the eye is characterized by redness, watering, and itching. May be hazardous in case of skin contact (irritant). Skin inflammation is characterized by itching, scaling, reddening, or, occasionally, blistering.

**Synergetic Products (Toxicologically)** Not available.

**Irritancy** Draize Test: Not available.

**Sensitization** Not available.

**Carcinogenic Effects** This material is not known to cause cancer in animals or humans.

**Toxicity to Reproductive System** Not available.

**Teratogenic Effects** Not available.

**Mutagenic Effects** Not available.

### Section 12. Ecological Information

**Ecotoxicity** Not available.

**BOD5 and COD** Not available.

**Toxicity of the Products of Biodegradation** The products of degradation are more toxic than the product itself.

### Section 13. Disposal Considerations

**EPA Waste Number** Not available.

**Treatment** Material does not have an EPA Waste number and is not a listed waste, however consultation with a permitted waste disposal site (TSD) should be accomplished.  
ALWAYS CONTACT A PERMITTED WASTE DISPOSER (TSD) TO ASSURE COMPLIANCE WITH ALL CURRENT LOCAL, STATE AND FEDERAL REGULATIONS.

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**Section 14. Transport Information**

**DOT Classification** Not available.

**TDG Classification** Not available.

**IMO/IMDG Classification** Not available.

**ICAO/IATA Classification** Not available.

**Section 15. Regulatory Information**

**U.S. Federal Regulations** TSCA 8(b) inventory: Calcium chloride dihydrate; Water  
 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  
 SARA 311/312 MSDS distribution - chemical inventory - hazard identification: Calcium chloride dihydrate: Delayed (Chronic) 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.

**WHMIS (Canada)** Class D-2B: Material causing other toxic effects (TOXIC).

CEPA DSL: Water

This product has been classified in accordance with the hazard criteria of the Controlled Product Regulations and the MSDS contains all required information.

**International Regulations**

**EINECS** Calcium chloride dihydrate Not available.  
 Water 231-791-2

**DSCL (EEC)** This product is not classified according to the EU regulations.

**International Lists** Australia (NICNAS): Calcium chloride dihydrate; Water

Japan (MITI): Calcium chloride dihydrate; Water

Korea (TCCL): Water

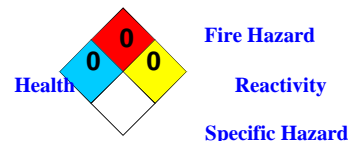
Philippines (RA6969): Calcium chloride dihydrate; Water

China: No products were found.

**State Regulations** New Jersey: Calcium Standard, 0.1000M  
 California prop. 65: No products were found.

**Section 16. Other Information**

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



Changed Since Last  
Revision

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Notice to Reader

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