



MATERIAL SAFETY DATA SHEET

Product Name: Calcium Chloride Injection, USP

1. CHEMICAL PRODUCT AND COMPANY INFORMATION

**Manufacturer Name
And Address** Hospira, Inc.
275 North Field Drive
Lake Forest, Illinois 60045
USA

**Emergency Telephone
Hospira, Inc.** CHEMTREC: 800 424-9300
224 212-2055

Product Name Calcium Chloride Injection

Synonyms None

2. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient Name Calcium Chloride
Chemical Formula CaCl_2

Component	Approximate Percent by Weight	CAS Number	RTECS Number
Calcium Chloride	10	58783-99-5	EV9800000
Water	90	7732-18-5	ZC0110000

3. HAZARD INFORMATION

Emergency Overview In clinical use, this material is an opiate analgesic used as a calcium supplement and to treat magnesium and potassium toxicity. Target organs include the cardiovascular system.

**Occupational Exposure
Potential** Information on the absorption of this compound via ingestion, inhalation or skin contact is not available. Avoid liquid aerosol generation and skin contact with solution.

Signs and Symptoms No signs or symptoms from occupational exposure are known. Clinical data suggests the following: tingling, sensation of heat, and chalky taste, while rapid injection can result in vasodilation, decreased blood pressure and heart rate, cardiac arrhythmias, syncope and cardiac arrest.

**Medical Conditions
Aggravated by Exposure** Hypersensitivity to the material and/or similar materials. Pre-existing ventricular fibrillation or hypocalcemia or skin or eye ailments.

Product Name: Calcium Chloride Injection, USP

4. FIRST AID MEASURES

Eye Contact:	Remove from source of exposure. Flush with copious amounts of water. If irritation persists or signs of toxicity occur, seek medical attention. Provide symptomatic/supportive care as necessary.
Skin Contact:	Remove from source of exposure. Flush with copious amounts of water. If irritation persists or signs of toxicity occur, seek medical attention. Provide symptomatic/supportive care as necessary.
Inhalation:	Remove from source of exposure. If signs of toxicity occur, seek medical attention. Provide symptomatic / supportive care as necessary.
Ingestion:	Remove from source of exposure. If signs of toxicity occur, seek medical attention. Provide symptomatic / supportive care as necessary.

5. FIRE FIGHTING MEASURES

Flammability:	Non-flammable
Fire & Explosion Hazard:	None
Extinguishing Media:	Use extinguishing media appropriate for the underlying cause of fire.
Special Fire Fighting Procedures	No special provisions required beyond normal fire fighting equipment such as flame and chemical resistant clothing and self contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

Spill Cleanup and Disposal	Absorb liquid with suitable material and clean affected area with soap and water. Dispose of materials according to the applicable federal, state, or local regulations.
-----------------------------------	--

7. HANDLING AND STORAGE

Handling	No special handling required.
Storage	No special storage required for hazard control. For product protection store at controlled room temperature of 15-30°C (59-86°F).
Special Precautions	Protect from freezing and extreme heat.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Component	Exposure limits		
	OSHA-PEL	ACGIH-TLV	Hospira EEL
Calcium Chloride	8 hr TWA: Not Established	8 hr TWA: Not Established	8 hr TWA: Not Established STEL: Not Established
Water	8 hr TWA: Not Established	8 hr TWA: Not Established	8 hr TWA: Not Established STEL: Not Established

Notes: OSHA PEL: US Occupational Safety and Health Administration – Permissible Exposure Limit
ACGIH TLV: American Conference of Governmental Industrial Hygienists – Threshold Limit Value.
EEL: Employee Exposure Limit.
TWA: 8 hour Time Weighted Average.
STEL: 15-minute Short Term Exposure Limit.

Product Name: Calcium Chloride Injection, USP

Respiratory Protection	Respiratory protection is not needed during normal product use.
Skin Protection	If solution contact with unprotected skin is likely, use of impervious gloves is a prudent practice.
Eye Protection	Eye protection is not required during expected product use conditions but may be warranted should a splash potential exist.
Engineering Controls	Engineering controls are not needed during normal product use conditions.

9. PHYSICAL/CHEMICAL PROPERTIES

Appearance/Physical State	Clear, colorless solution
Odor	Not determined
Boiling Point	Approximately that of water (100 °C, 212 °F).
Freezing Point	Approximately that of water (0 °C, 32 °F).
Vapor Pressure	Approximately that of water (17.5 mm Hg at 20 °C).
Vapor Density (Air=1)	Not Applicable
Evaporation Rate	Not Applicable
Bulk Density	Not Determined
Specific Gravity	Approximately that of water (1.0)
Solubility	Water, alcohol
pH	5.5 – 7.5

10. STABILITY AND REACTIVITY

Chemical Stability	Stable under standard use and storage conditions.
Incompatibilities	Methyl vinyl ether, zinc.
Hazardous Decomposition Products	Toxic fumes of chlorine.
Hazardous Polymerization	None

11. TOXICOLOGICAL INFORMATION:

Acute Toxicity:

Ingredient(s)	Percent	Test Type	Value	Units	Species
Calcium Carbonate	100	LD50	1000-1940	mg/kg	Rats, Mice, Rabbits

LD50 is the dosage producing 50% mortality.

Product contains 10% Calcium Chloride.

Acute Toxicity – Dermal:

Ingredient(s)	Percent	Test Type	Value	Units	Species
Calcium Carbonate	100	LD50(sc)	>5000	mg/kg	Rabbits

LD50 (sc) is the value for skin contact

Mutagenicity	Not Determined
Target Organ Effects	In clinical use target organ effects include the cardiovascular system.

Product Name: Calcium Chloride Injection, USP

12. ECOLOGICAL INFORMATION:

Aquatic Toxicity Not determined.

13. DISPOSAL CONSIDERATIONS:

Waste Disposal Disposal should be performed in accordance with the federal, state or local regulatory requirements.

Container Handling and Disposal Dispose of container and unused contents in accordance with federal, state, and local regulations.

14. TRANSPORTATION INFORMATION

DOT Not Regulated

Notes: DOT - US Department of Transportation Regulations

15. REGULATORY INFORMATION

TSCA Status	Calcium Chloride is listed on the TSCA inventory.
CERCLA Status	Not Regulated
SARA Status	Not Regulated
RCRA Status	Not Regulated
PROP 65 (Calif.)	Not Regulated

Notes: TSCA Toxic Substance Control Act
CERCLA, US EPA law, Comprehensive Environmental Response, Compensation, and Liability Act
SARA Superfund Amendments and Reauthorization Act
RCRA US EPA, Resource Conservation and Recovery Act
Prop 65, California Proposition 65

16. OTHER INFORMATION:

MSDS Coordinator	Global Occupational Toxicology
Date Prepared	September 15, 2005
Date Revised	October 21, 2008

Disclaimer:

The information and recommendations contained herein are based upon tests believed to be reliable. However, Hospira does not guarantee their accuracy or completeness NOR SHALL ANY OF THIS INFORMATION CONSTITUTE A WARRANTY, WHETHER EXPRESSED OR IMPLIED, AS TO THE SAFETY OF THE GOODS, THE MERCHANTABILITY OF THE GOODS, OR THE FITNESS OF THE GOODS FOR A PARTICULAR PURPOSE. Adjustment to conform to actual conditions of usage may be required. Hospira assumes no responsibility for results obtained or for incidental or consequential damages, including lost profits, arising from the use of these data. No warranty against infringement of any patent, copyright or trademark is made or implied.