



### Section I. Product Identification

<b>Product Name:</b> 1000ppm Calcium Standard solution (Ca <sup>2+</sup> )	<b>Catalog No.</b> SD2008-MSDS	<b>Effective Date</b> 10/23/02
<b>Hazardous Shipment Labeling:</b> DOT None	<b>IATA</b> None	
<b>Prepared by</b> 	<b>Title</b> Quality Assurance Chemist	
<b>Approved by</b> 	<b>Title</b> Director Regulatory Matters	

### Section II - Hazard Ingredients/Identity Information

Hazardous Components Specific Chemical Identity; Common Name(s)	CAS No.	%	OSHA PEL	ACGIH TLV	LD <sub>50</sub>
Calcium Chloride (CaCl <sub>2</sub> )	10043-52-4	1	None Listed	None Listed	1,000 (ORL-RAT)
Deionized Water (H <sub>2</sub> O)	7732-18-5	99	None Listed	None Listed	190,000 (IPR-MUS)

### Section III - Physical/Chemical Characteristics

<b>Boiling Point 750mm Hg</b>	100°C	<b>Freezing Point</b>	0°C
<b>Specific Gravity (H<sub>2</sub>O = 1)</b>	1	<b>Vapor Pressure at</b>	NA
<b>pH at 25 °C</b>	(5.5- 7.5)	<b>Solubility in water, % by wt at 25°C</b>	Miscible
<b>Volatiles, % by wt</b>	NA	<b>Evaporation Rate (Butyl Acetate = 1)</b>	NA
<b>Vapor Density (AIR = 1)</b> NA			
<b>Appearance and Odor</b> Colorless, Odorless liquid			

### Section IV - Fire and Explosion Hazard Data

<b>Flash Point (Method Used)</b> Not flammable	<b>Flammable Limits</b>	<b>LEL</b> NA	<b>UEL</b> NA
<b>Extinguishing Media</b> Dry chemical, water, foam or CO <sub>2</sub>			
<b>Special Fire Fighting Procedures</b> None, this solution is non-flammable			
<b>Unusual Fire and Explosion Hazards</b> None			

### Section V - Reactivity Data

<b>Stability</b>		<b>Conditions to Avoid</b>
Unstable	Stable X	None
<b>Incompatibility (Materials to Avoid):</b> None, suitable for any general storage.		
<b>Hazardous Decomposition or Byproducts</b> None		
<b>Hazardous Polymerization</b>		<b>Conditions to Avoid</b>
May Occur	Will Not Occur X	None

### Section VI - Health Hazard Data

<b>Route(s) of Entry:</b>	<b>Inhalation?</b> No	<b>Skin?</b> No	<b>Ingestion?</b> Yes
<b>Health Hazards (Acute and Chronic)</b> This product is a low hazard for skin and inhalation because of low concentration of salt. Moderately toxic by ingestion. CaCl <sub>2</sub> is an experimental tumorigenic TD Lo-112 gm/kg/20W-C ORL-RAT.			
<b>Carcinogenicity:</b> Not found on these lists.	<b>NTP?</b>	<b>IARC Monographs?</b>	<b>OSHA Regulated?</b>
<b>Signs and Symptoms of Exposure</b> Possible irritation of the skin for repeated exposure			
<b>Medical Conditions Generally Aggravated by Exposure</b> May cause burning and irritation in an open cut.			
<b>Emergency and First Aid Procedures</b> Skin and eyes - Wash off contact area with large amounts of water for 15 minutes. If ingested, induce vomiting. Consult a physician.			

### Section VII - Precautions for Safe Handling and Use

<b>Steps to Be Taken in Case Material is Released or Spilled</b> Clean up and wash down with water.
<b>Waste Disposal Method</b> Wash down drain with water. Observe all Federal, State and local laws when disposing of this product.
<b>Precautions to Be taken in Handling and Storing</b> Store at room temperature to protect product integrity. NFPA Rating: Scale (0-4); Health -2, Fire -0, Reactivity -0, Specific - None.
<b>Other Precautions</b> This product is not found on SARA TITLE III or CAL. Prop 65. Components are reported in EPA TSCA inventory.

### Section VIII - Control Measures

<b>Respiratory Protection (Specify Type)</b> None		
<b>Ventilation</b>	<b>Local Exhaust</b> None	<b>Special</b> None
	<b>Mechanical (General)</b> None	<b>Other</b> None
<b>Protective Gloves</b> None	<b>Eye Protection</b> Safety glasses	
<b>Other Protective Clothing or Equipment</b> Lab Coat		
<b>Work/Hygienic Practices</b> Emergency eyewash should be available. Wash hands after working with this product. No eating or drinking while working with this product.		