MATERIAL SAFETY DATA SHEET

WQ-CA

Section I. Product Identification

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

Section II - Hazard Ingredients/Identity Information

Hazardous Components Specific Chemical Identity; Common Name(s)	CAS No.	%	OSHA PEL	ACGIH TLV	LD_{50}
Calcium Chloride ($CaCl_2$)	10043-52-4	1	None Listed	None Listed	1,000 (ORL-RAT)
Deionized Water (H_2O)	7732-18-5	99	None Listed	None Listed	190,000 (IPR-MUS)

Section III - Physical/Chemical Characteristics

Boiling Point 750mm Hg	100°C	**Freezing Point**	0°C
Specific Gravity (H_2O = 1)	1	**Vapor Pressure at**	NA
pH at 25 °C	(5.5- 7.5)	**Solubility in water, % by wt at 25°C**	Miscible
Volatiles, % by wt	NA	**Evaporation Rate (Butyl Acetate = 1)**	NA
Vapor Density (AIR = 1) NA			
Appearance and Odor Colorless, Odorless liquid			

Section IV - Fire and Explosion Hazard Data

Flash Point (Method Used) Not flammable	**Flammable Limits**	**LEL** NA	**UEL** NA
Extinguishing Media Dry chemical, water, foam or CO2			
Special Fire Fighting Procedures None, this solution is non-flammable			
Unusual Fire and Explosion Hazards None			

Section V - Reactivity Data

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

Section VI - Health Hazard Data

Route(s) of Entry:	**Inhalation?** No	**Skin?** No	**Ingestion?** Yes
Health Hazards ***(Acute and Chronic)*** This product is a low hazard for skin and inhalation because of low concentration of salt. Moderately toxic by ingestion. $CaCl_2$ is an experimental tumorigenic TD Lo-112 gm/kg/20W-C ORL-RAT.			
Carcinogenicity: Not found on these lists.	**NTP?**	**IARC Monographs?**	**OSHA Regulated?**
Signs and Symptoms of Exposure Possible irritation of the skin for repeated exposure			
Medical Conditions Generally Aggravated by Exposure May cause burning and irritation in an open cut.			
Emergency and First Aid Procedures 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

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

Section VIII - Control Measures

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