Materials Safety Data Sheet

Revision Issued: 10/09/2010 Supercedes: 5/21/2009 First Issued: 12/01/85

Section 1 – Chemical Product and Company Identification

Product Name: Calcium Chloride, Liquid

CAS Number: 10043-52-4 CSSI MSDS No. CC06000



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Section II – Composition / Information On Ingredients					
Exposure Limits (TWA's) in Air					
Chemical	CAS	<u>%</u>	<u>ACGIH</u>	OSHA PEL	<u>STEL</u>
<u>Name</u>	<u>Number</u>		<u>TLV</u>		
Calcium	10043-52-4	24-40	N/A	N/A	N/A
Chloride					

Section III – Hazard Identification

Routes of Exposure: Calcium chloride can affect the body if it is ingested or if it comes in contact with the eyes or skin.

Summary of Acute Health Hazards

Ingestion: May irritate gastrointestinal tract and cause nausea and vomiting.

Inhalation: Causes irritation of nose and throat. Additional effects may include shortness of breath.

Skin: Causes mild irritation. Additional effects may include blisters or sores.

Eyes: Causes irritation and possible transient corneal injury. Tearing may occur.

Summary of Chronic Health Hazards: May cause perforation of the nasal septum and nosebleeds. Contact with heated product can cause thermal burns with resultant corneal injury.

Effects of Overexposure: Possible superficial burns and transient corneal injury.

Medical Conditions Generally Aggravated by Exposure: N/A

Section IV – First Aid Measures

Ingestion: If swallowed will cause nausea and vomiting. If victim is conscious, have

victim drink water. If victim is unconscious or having convulsions, do nothing except keep victim warm GET MEDICAL ATTENTION.

Inhalation: Move to fresh air; if breathing is difficult or discomfort persists, GET MEDICAL ATTENTION.

Skin: If necessary, remove contaminated clothing and shoe. Flush affected areas with plenty of water for at least 15 minutes.

Eyes: Promptly flood wit water and continue washing for at least 15 minutes. Consult an ophthalmologist.

Section V – Fire Fighting Measures

Flash Point: Not Flammable Auto ignition Temperature: Not Flammable

Lower Explosive Limit: N/A **Upper Explosive Limit:** N/A

Unusual Fire and Explosion Hazards: N/A

Extinguishing Media: This product is non-flammable

Special Firefighting Procedures: Avoid breathing corrosive vapors; keep upwind. Dike

area to prevent runoff and contamination of water sources.

Section VI – Accidental Release Measures

Dike the spilled liquid, and either pump back into original container or cover with san or clay-type substance for absorption.

Section VII - Handling and Storage

Store at ambient temperature. Prevent possible eye and skin contact by wearing protective clothing and equipment. Eye wash and safety shower should be provided within the immediate work area for emergency use. Launder contaminated clothing before re-use.

Section VIII – Exposure Controls / Personal Protection

Respiratory Protection: N/A

Ventilation: Use local exhaust in enclosed areas. Natural ventilation for outdoor areas. **Protective Clothing:** Employees should be provided with and use impervious clothing, rubber gloves, and rubber boots. Leather work boots and/or leather products will dehydrate with resultant shrinkage and possible destruction.

Eye Protection: Employees should be provided with and required to use splash-proof safety goggles and splash shields where there is any possibility of calcium chloride contacting the eyes.

Other Protective Clothing or Equipment: N/A

Work / Hygienic Practices: Avoid contact with the eyes, skin, and mucous membranes. Wash hands thoroughly with soap and water before eating, drinking, smoking or using toilet facilities. Do NOT place food, coffee or other drinks in the area where dusting or splashing of solutions is possible.

Section IX - Physical and Chemical Properties

Physical State: Liquid **pH:** 3.8-9

Melting Point / Range: N/A Boiling Point / Range: 118 °C

(244°F) for 38% Solution; 115°C

for 34.7% Solution

Appearance / Color / Odor: Clear to straw colored liquid, odorless

Solubility in Water: 100% **Vapor Pressure (mmHg):** N/A **Specific Gravity (Water=1):** 1.3 @ 60°F (30% **Molecular Wight:** 110.99 (for pure

Solution): 1.35 @ 60°F (for 34.7% Solution): 1.39 CaCl₂)

@ 60°F (for 37.5% Solution)

Vapor Density (Air=1): N/A % Volatiles: 70% for 33 Be; 65.3%

For 37.4 Be; 62.5% for 40 Be

How to detect this compound: N/A

Section X – Stability and Reactivity

Stability: Stable Hazardous Polymerization: Will not occur

Conditions to Avoid: N/A

Materials to Avoid: Metals will slowly corrode in aqueous solutions. Keep away from galvanized iron, aluminum, and tin. Boric acid and calcium oxide are incompatible.

Hazardous Decomposition Products: If liquid completely dries from fire, thermal decomposition products may include toxic and corrosive fumes of chlorine and hydrogen chloride. Product may react with some metals (aluminum, zinc, tin, ect.) to release flammable hydrogen gas.

Section XI – Toxicological Information

Toxicity Data (anhydrous calcium chloride):

TDLO: 112 g/kg, oral, 20 weeks, rat

LDLO: 274 mg/kg, oral, rat LD50: 1000 mg/kg, oral, rat

LD50: 264 mg/kg, intraperitioneal, rat

Moderately toxic by ingestion, slightly toxic by dermal absorption.

Section XII – Ecological Information

N/A

Section XIII – Disposal Considerations

Dispose of in accordance with local, state and federal regulations.

Section XIV – Transport Information

DOT Proper Shipping Name: N/A **DOT Hazard Class/I.D. No.:** N/A

Section XV – Regulatory Information

Reportable Quantity: N/A

NFPA Rating: Health -1; Fire -0/ Reactivity -0

0=Insignificant 1=Slight 2=Moderate 3=High 4=Extreme

SARA Title III: Section 311: Acute Hazard

Carcinogenicity Lists: No NTP: No IARC Monograph: No OSHA Regulated: No

Section XVI - Other Information

Synonyms/Common Names: Calcium Chloride-Liquid

Chemical Family/Type: Inorganic Salt

Sections changed since last revision: III, IV, VI, VII, VIII, IX, XI, XIII, XV

IMPORTANT! Read this MSDS before use or disposal of this product. Pass along the information to employees and any other persons who could be exposed to the product to be sure that they are aware of the information before use or other exposure. The MSDS has been prepared according to the OSHA Hazard Communication Standard (29 CFR 1910.1200). The MSDS information is based on sources believed to be reliable. Howe ever, since data, safety standards, and government regulations are subject to change and the conditions of handling and use, or misuse are beyond our control, **Custom Spray Service, Inc.** makes no warranty, either expressed or implied, with respect to completeness or continuing accuracy of the information contained herein and disclaims all liability for reliance thereon. Also, additional information may be necessary or helpful for specific conditions and circumstances of use. It is the user's responsibility to determine the suitability of this product and to evaluate risks prior to use, and then to exercise appropriate precautions for protection of employees and others.

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