



MATERIAL SAFETY DATA SHEET Effective: Mar. 6, 2014

Product Name: **Liquid Calcium Chloride**

WHMIS Classification: D2B

Section 1 – Hazardous Ingredients

CaCl₂ Concentration 20-45% Cas. # 10043-52-4 (anhydrous)

Section 2 – Preparation Information

Prepared by: Quality Department – Anco Chemicals Inc. (905) 832-2276 x233

Section 3 – Product Information

Product Identifier:	CaCl ₂ Solution
Manufacturers Name:	Anco Chemicals Inc.
Address:	85 malmo Court
City:	Maple
Province:	Ontario
Postal Code:	L6A 1R4
Product Use:	Refrigeration Brine, Deicer, dust control, mud drilling lubricant, thawing agent, concrete conditioner.

Section 4 – Physical Data

Physical State:	Liquid
Odour/Appearance:	Clear to slightly turbid liquid
Odour Threshold:	Odourless
Specific Gravity:	20% Cacl ₂ 1.19 @ 27°C 34% Cacl ₂ 1.34
Co-efficient of water/oil distribution:	N/A
Vapour Pressure:	1.1kpa 35% Cacl ₂
Boiling Point:	105°C at 20% Cacl ₂ and 114°C at 34% Cacl ₂
Freezing Point:	-59°F at 29.5% CaCl ₂
pH:	Neutral to slightly alkaline
Vapour Density (Air=1):	N/A
Evaporation Rate (ether=1):	N/A
Percent Volatile:	.01%
Solubility in water	Complete





Liquid Calcium Chloride effective Mar. 6, 2014 page2

Section 5 – Fire Explosive Hazard

Condition of Flammability: N/A
Means of Extinction: N/A
Explosive Data Sensitivity to Mechanical Impact: N/A
Flashpoint (°C) and Method: N.D.
Hazardous Combustion Products: non-combustible

Section 6 – Reactivity Data

Stability: Stable
Conditions to Avoid: None
Incompatibility (materials to avoid): Reacts violently with bromine trifluoride (BrF₃), or a mixture of boron trioxide and calcium oxide (B₂O₃ + CaO). Water reactive materials, such as sodium, causes an exothermic reaction. Methyl vinyl ether starts runaway polymerization reaction. Zinc as in galvanized iron yields hydrogen gas, which may explode under these conditions. Hazardous decomposition products: fumes of Chlorides (Cl-) are given off at temperature above 1600°C.
Hazardous Polymerization: Will not occur.

Other Precautions: Will undergo violent polymerization with methyl vinyl ether of heat.

Section 7 – Toxicological Properties

Route of Entry: Yes – skin contact, eye contact, inhalation, ingestion.
Effects of Acute Exposure to Product: Nose bleeds, mild dermatitis.
Effects of Chronic Exposure to Product: Dermatitis.
Exposure Limits: 10 mg./m³ (liquefied mist)
Irritancy to Product: Slight.
Sensitivity to Product: Slight.

Section 8 – Preventative Measures

Personal Protective Equipment:

Respiratory Protection: For dusty or misty conditions, wear NIOSH approved mist respirator.
Eyes and Face: For misty conditions, or when handling solutions where there is reasonable probability of eye contact, wear chemical safety goggles and hardhat. Under these conditions, do not wear contact lens.





Liquid Calcium Chloride effective Mar. 6, 2014 **page 3**

Section 8 – Preventative Measures (Cont'd)

Hands, arms and body: As a minimum, wear long sleeved shirt, trousers, rubber boots and gloves for routine product use. Impervious gloves when using solutions.

Storage: Keep containers closed. Protect from physical damage. Do not store in metals, which this solution corrodes. See section 6.

Normal Handling: Avoid contact with eyes, skin or clothing. Avoid breathing dust. Use good hygiene and housekeeping.

Section 9 – First Aid Measures

Inhalation: Promptly remove to fresh air. Restore and/or support breathing. Consult a physician for observation and treatment.

Ingestion: If conscious, immediately give 2 to 4 glasses of water; and induce vomiting under medical supervision.

Eye Contact: Flush eyes promptly with plenty of running water, continuing at least 15 minutes. Get medical attention.

Skin Contact: Remove contaminated clothing. Wash with plenty of soap and running water. Get medical attention if irritation persists.

This Material Safety Data Sheet is offered for your information, consideration and investigation as required by Federal Hazardous Products Act and related Legislation. The information is believed to be accurate, but Anco Chemicals Inc. provides no warranties, either expressed or implied.

