

LIQUID CALCIUM CHLORIDE

Product Data Sheet

General Description

Liquid calcium chloride (CaCl₂) is an odorless, slightly alkaline, colorless fluid. TETRA's liquid calcium chloride is available in a variety of concentrations and grades, including food grade and NSF certified.

With our proprietary manufacturing process, TETRA Chemicals is the only manufacturer that uses food grade quality hydrochloric acid and high purity limestone as raw materials to produce CaCl₂. This results in CaCl₂ with very low levels of alkali metals, iron, and other impurities when compared to other manufacturers that produce CaCl₂ from brines.

Applications

TETRA liquid calcium chloride is used in various applications to retard cold weather hazards, including snow and ice control on roadways (meets or exceeds ASTM D98-95 and AASHTO MI 44-86 standards). It is also used as an accelerator for ready-mix concrete curing, and as an anti-freeze for coal storage and transportation.

This product is widely used in oilfield applications as completion and workover fluids, and as a drilling mud additive to increase density and prevent clay hydration.

Liquid CaCl₂ also can be used as:

- A fugitive dust control agent and roadbed stabilizer,
- A weighting fluid for tractor tires to improve traction,
- An inexpensive source of calcium in wastewater treatment to remove fluoride and break oil/water emulsions,
- A low-temperature brine in refrigeration systems, and
- An additive in many other industrial applications.

TETRA Chemicals

24955 Interstate 45 North
The Woodlands, Texas 77380

Phone: 281.367.1983

Customer Service: 800.327.7817

Fax: 281.298.7150

www.tetrachemicals.com

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Availability

Liquid calcium chloride is available from over 20 plant and terminal locations throughout North America. For the location nearest you, refer to the plant and terminal map available on our website (www.tetrachemicals.com) or contact your TETRA sales or customer service representative.

Safety and Handling

Liquid calcium chloride is a strong salt solution. Wear appropriate protective, impervious clothing. Wear safety glasses with non-flexible side shields or chemical goggles for proper protection of the eyes. Wear appropriate protective non-leather protective gloves and boots. Chemical protective gloves and boots such as PVC or Nitrile are recommended. Leather products do not offer adequate protection and will dehydrate with resultant shrinkage and possible destruction. This product should be handled in areas with proper ventilation. Before using this product, refer to the SDS which is available on the Company's website for complete safety and handling guidelines.

PHYSICAL PROPERTIES

Appearance	Colorless liquid
Odor	None
Assay	28 to 40% by weight CaCl ₂
Crystallization Temperature	-38°F (-39°C) to 55.9°F (13.3°C)
Specific Gravity @ 68°F (20°C)	1.264 to 1.403
Bulk Density	10.53 to 11.69 lb/gal

CHEMICAL PROPERTIES

Chemical	CaCl ₂
pH	Slightly alkaline
Impurities (on 100% CaCl₂ basis)	
Alkali Chlorides	< 0.1% by weight
Magnesium (as MgCl₂)	< 0.1% by weight
Other impurities (not H₂O)	< 1.0% by weight