



# LIQUID CALCIUM CHLORIDE

## Product Data Sheet

### General Description

Liquid calcium chloride ( $\text{CaCl}_2$ ) 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  $\text{CaCl}_2$ . This results in  $\text{CaCl}_2$  with very low levels of alkali metals, iron, and other impurities when compared to other manufacturers that produce  $\text{CaCl}_2$  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  $\text{CaCl}_2$  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.

### 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](http://www.tetrachemicals.com)) or contact your TETRA sales or customer service representative.

### Safety and Handling

Liquid calcium chloride is a strong salt solution. Protective clothing, rubber gloves and eye protection are recommended. Rubber safety boots should also be worn in work areas, since calcium chloride can damage leather. This product should be handled in areas with proper ventilation. Before using this product, refer to the MSDS (available on the Company's website) for complete safety and handling guidelines. For proper disposal guidelines for calcium chloride wastes, consult the appropriate local regulatory authorities.

#### PHYSICAL PROPERTIES

<b>Appearance</b>	Colorless liquid
<b>Odor</b>	None
<b>Assay</b>	28 to 40% by weight $\text{CaCl}_2$
<b>Crystallization Temperature</b>	-38°F (-39°C) to 55.9°F (13.3°C)
<b>Specific Gravity @ 68°F (20°C)</b>	1.264 to 1.403
<b>Bulk Density</b>	10.53 to 11.69 lb/gal

#### CHEMICAL PROPERTIES

<b>Chemical</b>	$\text{CaCl}_2$
<b>pH</b>	Slightly alkaline
<b>Impurities (on 100% <math>\text{CaCl}_2</math> basis)</b>	
<b>Alkali Chlorides</b>	< 0.1% by weight
<b>Magnesium (as <math>\text{MgCl}_2</math>)</b>	< 0.1% by weight
<b>Other impurities (not <math>\text{H}_2\text{O}</math>)</b>	< 1.0% by weight

### TETRA Chemicals

25025 Interstate 45 North, Suite 600  
The Woodlands, Texas 77380

**Phone:** 281.367.1983

**Customer Service:** 800.327.7817

**Fax:** 281.298.7150

[www.tetrachemicals.com](http://www.tetrachemicals.com)

*Because use conditions and applicable laws may differ from one location to another and may change with time, Customer is responsible for determining whether products and the information in this document are appropriate for Customer's use and for ensuring that Customer's workplace and disposal practices are in compliance with applicable laws and other governmental enactments. Seller assumes no obligation or liability for the information in this document. NO WARRANTIES ARE GIVEN; ALL IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE ARE EXPRESSLY EXCLUDED. Further, nothing contained herein shall be taken as a recommendation to manufacture or use any of the herein described materials or processes in violation of existing or future patents.*

TETRA CHEMICALS