



Description

Calcium Chloride with chemical formula of CaCl_2 is an inorganic compound which is widely used in de-icing applications, dust control and oil field usage. The Calcium Chloride is used to prepare completion, workover, perforation and packer fluid in oil field. Calcium Chloride is also used in oil-based drilling fluids as a shale inhibition agent and water-activity reducing agent. Calcium Chloride is highly hygroscopic and its hydration is an exothermic reaction. Calcium Chloride is available with purity of 76-78%.

Application

- Calcium Chloride is widely used to lower freezing point of water, and prevent ice formation
- Calcium Chloride is used to de-ice purposes.
- A concentrated solution of Calcium Chloride can be used to put a liquid layer on the surface of dirt roads, which suppresses the formation of dust in order to providing a cushioning layer.
- Calcium Chloride is common in drying tubes in laboratories and related drying operations
- Calcium chloride is a common concrete accelerator for the initial setting
- Used to prepare completion, packer and work-over fluids with density of ranging 8.4 lb/gal to 11.8 lb/gal
- Used to prepare oil-based drilling fluids
- Used to be mixed with CaBr_2 to prepare fluids with densities up to 15.1 lb/gal
- Used to be mixed with ZnBr_2 to prepare fluids with densities up to 19.2 lb/gal
- Industrial processing – as additives in plastics, for calcium salt production, drainage aids for wastewater treatment, etc.
- hydrocarbon desiccant, refrigeration brine, food processing agent or coagulating agent and additive for foods

Advantages

- Mix readily with CaBr_2 and ZnBr_2 Brines
- High purity product

Limitations

- The use of Calcium Chloride may be restricted by HSE rules in some areas.
- It easily absorbs water.
- It releases excessive heat while mixing in water.
- It may have significant unpleasant effect on various rubber drilling components.

Typical Properties

APPEARANCE	White Powder
CHEMICAL FORMULA	CaCl_2
SOLUBILITY IN WATER @ 20 C DEGREES	Very soluble in water
PURITY	76-78%
SPECIFIC GRAVITY	2.15 – 2.2

Packaging

Calcium Chloride is available in 1 MT Big Bags or 25 KG SXS.