

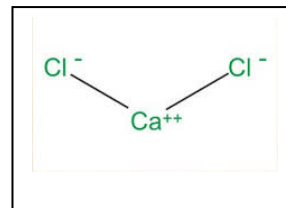


PRODUCT DATA SHEET

CALCIUM CHLORIDE ANHYDROUS POWDER

Sr.no	Description	Specification
01.	Content of CaCl_2	$\geq 94\%$
02.	PH	7.5~8.5
03.	NaCl	$\leq 5\%$
04.	MgCl_2	$\leq 0.3\%$
05.	Ca(OH)_2	$\leq 0.3\%$
06.	Water Insoluble	$\leq 0.2\%$
07.	Heavymetal(asPb)	$\leq 10\text{ppm}$
08.	Arsenic	$\leq 10\text{ppm}$

Formula



Applications :

1. Calcium Chloride for Oil & Gas Drilling

Calcium Chloride is used in establishing and maintaining oil and gas wells. It helps well fluids gain needed consistency, increases density and stabilizes shale formations. As a completion fluid it seals well casings and displaces drilling mud. In short, Calcium Chloride is used in several applications for new or existing wells to improve efficiency and production. Calcium Chloride Prills are used in gas and oil drilling. It helps keep gases from forming and helps sludge from getting out of hand.

a) Drilling Muds:

Calcium Chloride is used in drilling mud to cool and lubricate the bit and to remove cuttings from the hole. Calcium Chloride helps add density to the mud to overcome formation pressures and keep oil, gas, and water in place. Calcium Chloride inhibits clay and shale hydration, adds needed weight to overcome formation pressure, aids in carrying cuttings to the surface, and is easily diluted from more concentrated solution.

b) Completion Fluids:

Calcium Chloride is used as a completion fluid just before the producing formation is reached to flush the hole clean of solids so the casing can be cemented into place. As a clear, solids free brine, Calcium Chloride is ideal as a completion fluid with a density range of 10 to 12 pounds per gallon.



c) Concrete Accelerator:

As a pipe that runs from the reservoir to the surface, the casing is usually cemented into place to ensure a pressure tight connection to the oil and gas reservoir. The concrete also prevents caving, confines production to the well bore, and provides a way to control well pressure. Calcium Chloride dramatically cuts set time for the concrete and can be used down-hole to several thousand feet.

d) Packer Fluid:

Once the casing is cemented into place, a smaller diameter pipe, the tubing, is inserted into the casing. Tubing makes the flow of oil or gas more efficient and can be replaced if plugs develop or it is damaged. Tubing is used with a packer fluid that keeps the well fluids away from the casing to minimize corrosion. The tubing packer combination reduces well pressure on the casing and reduces the chance that a casing leak could become a blowout. Calcium Chloride is used in packing the annular space between the tubing and the casing. It helps maintain pressure levels because it has sufficient density to offset the pressure on the casing.

e) Workover Fluid:

Calcium Chloride is used as a workover fluid, flushing wells free of solids before they are repaired or before reworking a well that has been idle for some time.

2. Snow & Ice Removal

Road and Maintenance crews have a huge task every winter removing snow and ice from roadways to ensure safe travel. In adverse winter conditions, Calcium Chloride is best for melting snow and ice.

CaCl_2 is a natural salt brine that is exothermic and hygroscopic. This ability to release heat in a chemical reaction and attract moisture creates an effective anti-freeze that helps speed up the de-icing process.

Calcium chloride provides effective liquid ice control when applied either before or after a snow or ice storm. When used prior, calcium chloride inhibits the bonding of snow and ice to the pavement, making it easier for snowplows to clear roads down to the bare pavement. Application of this road salt on ice after a storm is essential for winter maintenance, as it melts ice fast and efficiently.

In addition to liquid ice control, calcium chloride is also used to freeze-proof sand that is spread on icy roads. With a low freezing point, this natural anti-freeze can ensure piles of sand are free flowing all winter.



3. Calcium Chloride for Ready Mix Concrete

Calcium Chloride is the most commonly used accelerator for concrete. Experts agree that logical and prudent use of Calcium Chloride in concrete has shown to be beneficial for early strength and accelerated set times. Calcium Chloride is one of the oldest and most successfully used concrete accelerator and early strength admixture used in the concrete industry.

Benefits of using Calcium Chloride in Concrete:

- a) Greatly reduces finishing labor on flat work
- b) Provides for earlier form removal and reuse on structures
- c) High early strength reduces breakage and loss of precast units
- d) Reduces time of set and increases early strength of fly ash concrete
- e) Speeds up curb and gutter placement
- f) Provides high early strength for interstate and local highway repair

4. Dust Control And Base Stabilization

Dust control and road stabilization is a major concern regarding unpaved roads. Dust obscures the vision of drivers and increases wear and tear on vehicles. In addition, businesses and communities need to meet clean air standards set by the E.P.A. To ease the burden of your road maintenance.

Calcium Chloride is a brine solution that draws moisture from the environment (hygroscopic) which acts to keep road surfaces moist and compact. This hygroscopic property holds the dust down and keeps fines on the road where they belong.

Why Calcium Chloride?

In performance studies, Calcium Chloride is ranked amongst the best in overall performance in controlling dust. In fact, in environments that cause the worst dust, Calcium Chloride showed a greater affinity for water than other hygroscopic solutions. Because of Calcium Chloride's superior ability to draw moisture to itself, it is the best choice for dust control requirements.

Concentration:

Another important advantage Calcium Chloride has is that it can be concentrated to a higher strength. Calcium Chloride is a processed material manufactured under strict quality control conditions. That means the weight percentage of Calcium Chloride you order is exactly what you will get. Calcium Chloride can be concentrated to 38% solids requiring less product to be applied to achieve the same results as our nearest competitor. In addition, less water shipped results in lower freight costs.



Road Stabilization:

Besides controlling dust by keeping fines on the road, Calcium Chloride keeps the surface dense, hard, and smooth. Freeze thaw damage is reduced so road breakup is less likely. The aggregate and crown remain intact which assures proper drainage and fewer potholes caused by erosion and washouts. This leads to reduced maintenance costs in the form of fewer bladings. Calcium Chloride eliminates undue wear on equipment and saves economically by reducing water runs and aggregate replacement. Calcium Chloride is a competitive alternative to your dust and road stabilization needs. In fact, Calcium Chloride is one of the most prevalently used dust control products in the country.

5. Tire Weighting

The weight of high density liquid calcium chloride (CaCl_2) makes it very effective in **tractor tire** weighting.

Liquid calcium chloride increases tractor traction

Calcium chloride in tires provides improved drawbar pull

Extend the life of tires by hydra-inflating with a calcium chloride brine

CaCl_2 in tractor tires results in better fuel consumption

Plus, with a low freezing point (-35°C), calcium chloride brine as tire weights is well suited to cold prairie winters in Alberta, B.C., Saskatchewan, Manitoba and the northern United States.

6. For Wastewater Odor Control

Ammonia and hydrogen sulfide are typically unwelcome by-products of livestock operations. Calcium chloride is effective **odor control** product that help neutralize these and other **odors** caused by manure, septic systems and lagoons.

Liquid calcium chloride and magnesium compounds are natural **odor** neutralizers that are also environmentally friendly. Applications of these **odor control** products provide relief in industrial applications as well as agricultural.

Dust generated by feed, bedding, manure and animals themselves carries gases and odors. Spreading calcium chloride on gravel or unpaved roads that pass near feedlots and farms can reduce **odors** by controlling dust.

Our calcium chloride products can also be surface-applied on manure / lagoons as an **odor** cleaner. Calcium chloride can also be incorporated in animal feed as an acidifying compound that lowers urine pH and smell. Sewage treatment and industrial food processing plants utilize calcium chloride (CaCl_2) as a clarifying and **odor** control agent in their effluent streams.



7. For Effluent Treatment

Calcium chloride is a preferred solution for effluent treatment over elements such as barium, strontium and magnesium electrolytes. As a highly soluble septic additive, this natural salt brine has the ability to remove flocculants from industrial waste water before the effluent is released into waterways.

In addition to its use as a water clarifying agent, calcium chloride is also effective as a drainage aid in water or septic treatments.

Calcium chloride causes the precipitation of such compounds as fluoride into a chemically stable form, thereby neutralizing alkaline water. This environmentally friendly option is popular because it offers many other benefits:

Cost effective

Obtain pH control

Increased rate of removal of flocculents

Easy to dispense and monitor

Low quantities needed

8. Commercial Refrigeration

Calcium chloride is a kind of important cryogen used by freezing machine and when making ice. Calcium chloride (CaCl_2) is a natural salt brine that is well suited to the low temperature requirements of commercial and industrial refrigeration. We also add an inhibitor to our high grade solution to prevent corrosion in pipes and vessels.

9. CALCIUM CHLORIDE is prime raw material for various calcium salts.

10. Other Applications:

CALCIUM CHLORIDE acts as dehydration agent when producing alcohol, ester, aether and crylic acid.

CALCIUM CHLORIDE acts dryer to dry nitrogen, oxygen, hydrogen, hydrogen chloride and sulfur dioxide.

CALCIUM CHLORIDE is a precipitator in producing lake paint.

CALCIUM CHLORIDE is protective agent and refining agent of aluminum magnesium metallurgy.