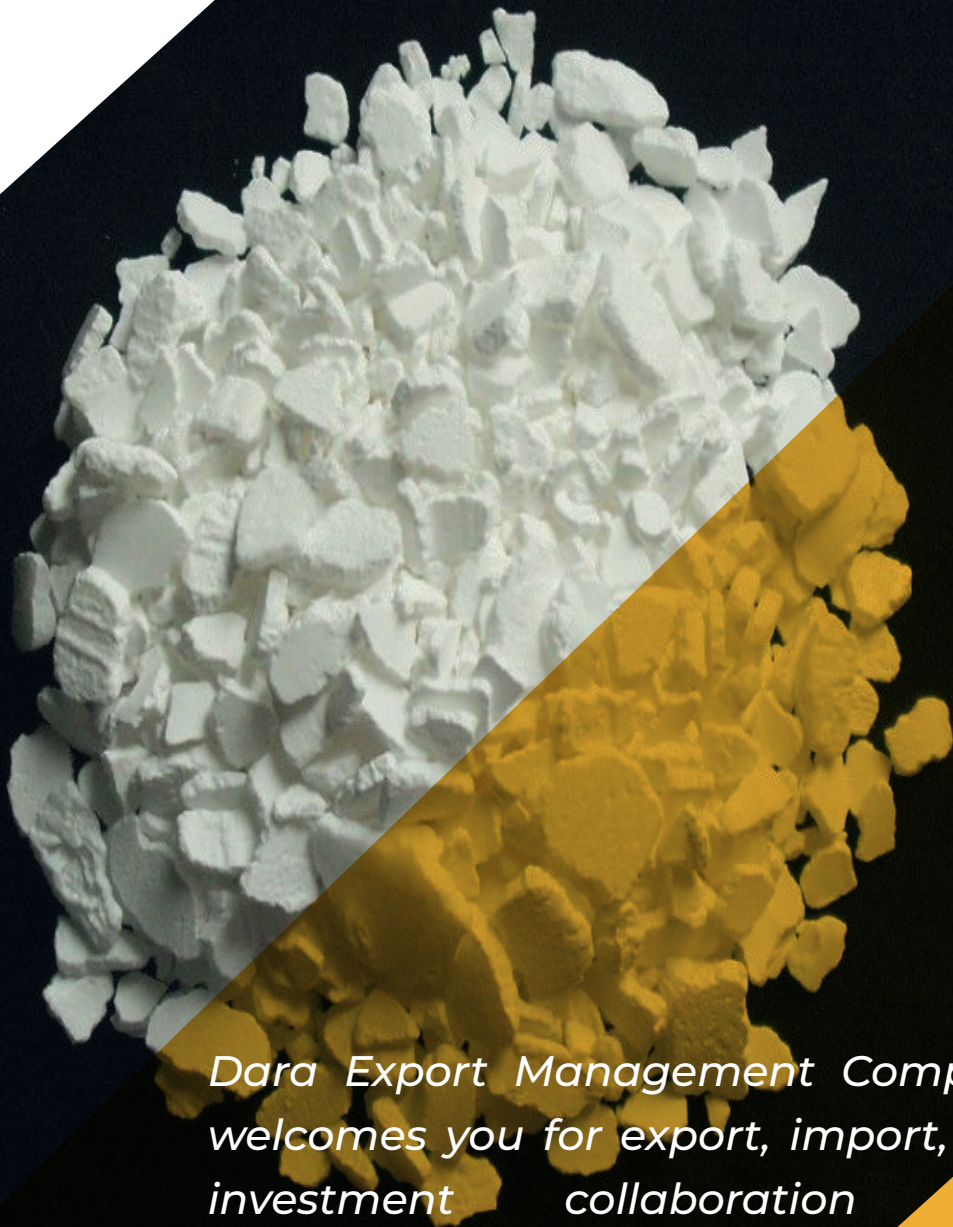




DISCOVERING **CALCIUM CHLORIDE**

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INTRODUCTION TO

Calcium chloride is a chemical compound that is highly versatile and finds use in various industries. It is a white crystalline solid that is highly soluble in water and has a strong, salty taste.



Its unique properties make it useful for a wide range of applications, including food preservation, water treatment, construction, and pharmaceuticals.

Its hygroscopicity makes it a valuable desiccant, and its ability to lower the freezing point of water makes it useful in de-icing and anti-icing applications. Additionally, calcium chloride can accelerate the set time of concrete, increase water hardness, and is used in medicine to treat conditions such as hypocalcemia and electrolyte imbalances.

CALCIUM CHLORIDE

Due to its versatility and widespread use, calcium chloride plays an important role in various industries.



WHAT IS CALCIUM CHLORIDE?

Calcium chloride is a versatile chemical compound with a wide range of applications in industries such as food preservation, water treatment, construction, and medicine.

CaCl₂

Calcium chloride (CaCl₂) is a chemical compound that consists of one calcium ion and two chloride ions. It has a molecular weight of 110.98 g/mol and a molar mass of 110.98 g/mol.

NATURAL

Calcium chloride can be found naturally in the Earth's crust and in the oceans. It can also be produced synthetically by reacting calcium carbonate or calcium hydroxide with hydrochloric acid.

HISTORY

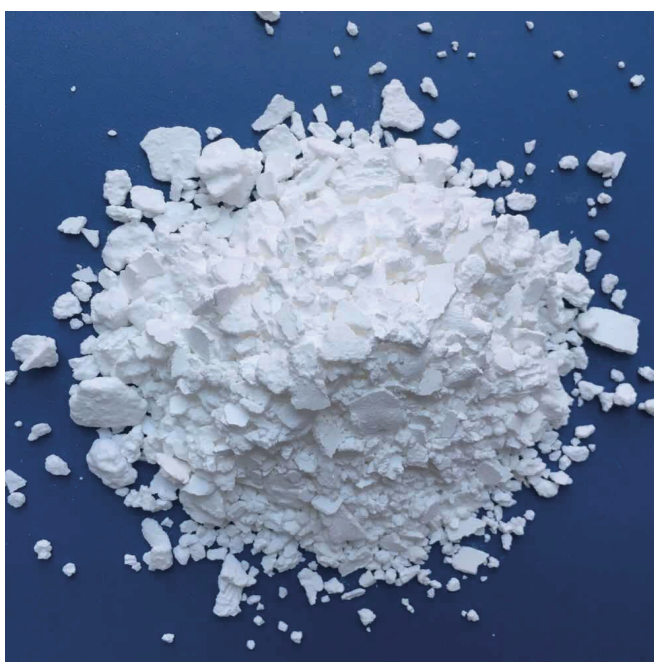
Calcium chloride has a long history of use, from the ancient Romans using it to dry roads to modern-day applications such as a desiccant, de-icing agent, and concrete accelerator.



Properties and Applications OF CALCIUM CHLORIDE

Calcium chloride is a hygroscopic compound that readily absorbs moisture from the surrounding environment.

Its ability to absorb water makes it a useful desiccant for controlling humidity in various applications, such as in packaging, storage, and preservation of dry goods. Additionally, calcium chloride is commonly used as a de-icing agent due to its ability to lower the freezing point of water, preventing ice from forming on roads and sidewalks.



Calcium chloride accelerates concrete set time and improves its durability, making it useful in the construction industry. It also has various applications in food preservation, pharmaceuticals, water treatment, and as a medication for cardiac arrest and electrolyte imbalances. Its versatility and unique properties make it a valuable chemical compound with many industrial and medicinal uses.

TYPES OF CALCIUM CHLORIDE



Calcium chloride comes in different forms, with varying characteristics that make them suitable for specific applications.

Selecting the appropriate type of calcium chloride is crucial for ensuring the effectiveness of the application. For example, anhydrous calcium chloride is not suitable for de-icing or dust control applications as it can cause skin irritation and harm vegetation.

In contrast, dihydrate calcium chloride may not be suitable for industrial applications where quick moisture absorption is necessary.

Therefore, understanding the properties of each type of calcium chloride is essential for choosing the right one for the intended use.

Anhydrous calcium chloride is a dry, white powder that is highly hygroscopic and absorbs moisture quickly from the environment.

It has a higher calcium content than dihydrate calcium chloride and is typically used in applications where fast-drying and moisture-absorbing properties are required, such as in the oil and gas industry.



Dihydrate calcium chloride is a crystalline substance that contains two molecules of water per molecule of calcium chloride. It is commonly used in de-icing and dust control applications and as a desiccant for drying air and gases. Dihydrate calcium chloride is less hygroscopic than anhydrous calcium chloride and does not require the same level of careful handling.

Essential Details

Classification: Chemical

Place of Origin: Middle East

Purity: 99%

Appearance: White flakes

Brand Name: Dara

Expiry date: Depends on keeping conditions

Sample: 25KG

Supply Ability

1000 Metric Tons per Month



Available
Languages
for Negotiation

English - 中文
العربية - فارسی

Product Analyses

| Item | Chemical and Physical Characteristics of the Product | Standard Range | Range of Product Characteristics that our Company Supplies | Reference Standard |
|------|---|----------------|--|--------------------|
| 1 | Purity of Calcium Chloride (CaCl_2), Mass Percentage (waterless) | Min 94 | Min 94 | INSO 18193 |
| 2 | Fluorine (F), Mass Percentage | Max 0.004 | Max 0.004 | ISIRI 13571 |
| 3 | Total Alkalinity (based on NaCl), Mass Percentage of the Active Material CaCl_2 | Max 6 | Max 4 | INSO 18193 |
| 4 | Total Magnesium (based on MgCl_2), Mass Percentage of the Active Material CaCl_2 | Max 0.5 | Max 0.2 | INSO 18193 |
| 5 | Calcium Hydroxide $\text{Ca}(\text{OH})_2$, Mass Percentage of the Active Material CaCl_2 | Max 0.2 | Max 0.1 | INSO 18193 |
| 6 | Appearance | White Granular | OK | ISIRI 13571 |
| 7 | Particle Size | — | 4-1 mm | — |



CONTACT US



P : +98 922 095 9719
+98 920 077 5979

E : sales@daraemc.com
w : www.daraemc.com

77 Ferdos Commercial Complex
Arak Road, Qom, Iran