

# Calcium Nitrite

## Specifications

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Property	Value
CAS Number	13780-06-8
EINECS Number	237-424-2
Molecular Formula	Ca(NO <sub>2</sub> ) <sub>2</sub>
Molecular Weight	132.09
Other Names	Calcium Salt of Nitrous Acid; Calcium dinitrite; Daraset
Appearance	White powder

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Item	Superior Grade	Grade I	Grade II
Calcium Nitrite (dry basis)	94% min	92% min	90% min
Calcium Nitrate (dry basis)	4.5% max	5% max	6% max
Hydrogen Oxidate Calcium	1.0% max	1.0% max	1.0% max
Moisture	1.0% max	1.0% max	1.0% max
Insoluble In Water	0.6% max	1.0% max	1.0% max

## Applications

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Calcium Nitrite fundamentally serves to prevent the alkali-aggregate reaction and electric chemical corrosion of concrete. It improves the mechanical property and durability of concrete in order to obtain the highest quality. Calcium Nitrite is mainly used as an additive for concrete mixtures. It can be made into antifreeze for concrete, reinforcing steel bar rust preventative, and early strength admixture. It can be used as a heavy oil abluent, lubricating oil emulgator, and an organic chemical synthesis agent.

### Featured Applications of Calcium Nitrate:

- **Concrete Antifreeze:** It can depress the freezing point of concrete in order to make sure that the construct temperature can reach as low as -25°C. At the subzero temperature, it can impel prehydration of minerals in concrete. It is a new kind of antifreeze containing little to no chlorine and alkali.
- **Reinforcing Steel Bar Rust Preventative:** It has very good passivation and rust preventative effects for reinforcing steel bars. It can prolong the life of a building for an additional 20-50 years with an added 2-3% calcium nitrite concentration in concrete.
- **Composite Early Strength Admixture:** It can improve the intensity of concrete, reduce the concrete dosage, and shorten overall construction period.

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**Packaging**

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Packaged in 25/40kg net weight inner polypropylene/polyethylene plastic bag with an outer woven bag, or as required by customer.

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**Storage**

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Store in a dry and cool place, away from incompatible materials. Shelf life: 1 year. Avoid contact with eyes, skin, and clothing. Wear protective articles as appropriate. In case of contact, rinse cautiously with water for several minutes. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Consult a physician immediately if swallowed.