

Donplast CN30

Corrosion inhibiting admixture for reinforced concrete (Formerly known as Flocrete CN30)



Description

Donplast CN30 is a calcium nitrite based concrete admixture which acts as a corrosion inhibitor for steelreinforced concrete. Donplast CN30 contains a minimum of 30% of calcium nitrite.

Applications

- ▲ Recommended for all types of steel-reinforced concrete in environments that have exposure to chlorides or de-icing salts.
- ▲ Protects against steel corrosion in reinforced concrete.

Advantages

- ▲ Extends the working life of reinforced concrete structures.
- ▲ Compatible with other admixtures.

Protection Mechanism

Donplast CN30 protects the steel reinforcement in concrete by interacting with the reinforcement steel at the contact surface with the concrete protecting the passivation layer and significantly delaying corrosion initiation and slowing down the corrosion rate

Compatibility

Donplast CN30 is suitable to use with all types of Portland cement and cement replacement materials. Donplast CN30 is compatible with other DCP admixtures used in the same concrete mix.

If more than one type of admixture is to be used, they must be dispensed to the mix separately.

Method of Use

Donplast CN30 should be added to the concrete with the mixing water to achieve optimum performance.

An automatic dispenser should be used to dispense the correct quantity of Donplast CN30 to the concrete mix.

Technical Properties @ 77°F (25°C):

Appearance:	Light yellow liquid
Freezing point:	≈ 14°F (-10°C)
Specific gravity:	1.30 ± 0.03
pH:	9 - 11
Chloride content:	Chloride-free

Dosage

The recommended dosage of Donplast CN30 is 7.2 - 28.7 fl oz/ft³ (7.5 - 30 liters/ m³) of concrete, depending on the chloride exposure conditions.

Table 1 can be used as a guide to show the level of chloride protection at different dosages. Donplast CN30 water content should be included in the W/C ratio calculation.

Dosage rate of Donplast CN30 (fl oz/ft ³)	Chloride (lb/ft ³)
9.6	0.22
11.5	0.29
14.4	0.37
16.3	0.42
19.1	0.48
21.1	0.52
24.0	0.57
28.7	0.59

Setting Time

- ▲ The presence of Donplast CN30 in the concrete mix will decrease the initial and final setting time.
- ▲ Trial mixes should be carried out to determine the effect of Donplast CN30 on the setting time.
- ▲ DCP retarding admixtures can be used to prevent slump loss or finishing problems which may occur because of the accelerating property of Donplast CN30.
- ▲ Donplast CN30 can be used for cold weather concreting due to its set accelerating properties.
- ▲ Accelerating properties should be considered when scheduling concrete placement operations, particularly the mixing time, transportation time, compaction and presence of cold joints.

Donplast CN30

Cleaning

Donplast CN30 spillage should be collected with a suitable absorbent like sand or vermiculite and transferred into suitable containers. Donplast CN30 should not be allowed to enter sewers or open bodies of water.

If the spillages have dried, the material is classified as ignitable waste. Dispose of in accordance with local environmental regulations.

Packaging

Donplast CN30 is available in 5 gal (19 litre) containers as well as 275 gal (1,041 litre) and 330 gal (1,249 litre) IBC totes. Bulk supply in tanker trucks is also available upon request.

Storage

Donplast CN30 has a shelf life of 12 months from date of manufacture if stored at temperatures between 35°F and 122°F (2°C and 50°C).

Drums must be rolled before use. Bulks must have a recirculation pump.

If these conditions are exceeded, contact DCP Technical Department for advice

Cautions

Health and Safety

Donplast CN30 is classified as a hazardous material. Donplast CN30 should not come into contact with skin and eyes.

In case of contact with eyes, immediately flush with plenty of water and seek medical attention.

For further information, refer to the Material Safety Data sheet.

Fire

Donplast CN30 is nonflammable.

More from Don Construction Products

A wide range of construction chemical products are manufactured by DCP which include:

- ▲ Concrete admixtures.
- ▲ Surface treatments
- ▲ Grouts and anchors.
- ▲ Concrete repair.
- ▲ Flooring systems.
- ▲ Protective coatings.
- ▲ Sealants.
- ▲ Waterproofing.
- ▲ Adhesives.
- ▲ Tile adhesives and grouts.
- ▲ Building products.
- ▲ Structural strengthening.

Don Construction Products Inc.
2826 Lineberger Industrial Dr.
Lancaster, SC 2970
USA

Note:

We endeavour to ensure that any information, advice or recommendation we may give in product literature is accurate and correct. However, because we have no control over where and how products are applied, we cannot accept any liability arising from the use of the products.

