

Supaflo PC3100

High performance concrete superplasticiser and retarding admixture based on polycarboxylic technology



Description

Supaflo PC3100 is a high performance super plasticising and retarding admixture based on polycarboxylic ether polymers with long chains specially designed to enable the water content of the concrete to perform more effectively.

This effect can be used in high strength concrete and flowable concrete mixes, where retardation and long workability retention are required, and to achieve highest concrete durability and performance.

Applications

- ▲ High strength and high performance concrete.
- ▲ Structures with congested reinforcement.
- ▲ Improved cohesion allow for use in mass concrete pours and piling.
- ▲ Concrete requiring long workability retention.

Advantages

- ▲ High density and impermeable concrete through very high water reduction.
- ▲ Minimises segregation and bleeding problems by improving cohesion.
- ▲ Higher early and ultimate compressive strengths.
- ▲ Better resistance to carbonation.
- ▲ Better resistance to aggressive atmospheric conditions.
- ▲ Reduced shrinkage and creep.
- ▲ Provides increase retardation, controls the heat of hydration and yields high ultimate strength.

Compatibility

Supaflo PC3100 can be used with all types of Portland cement and cement replacement materials. Supaflo PC3100 should not be used in conjunction with other admixtures unless DCP technical department approval is obtained.

Standards

Supaflo PC3100 complies with IS 9103:1999(2007) and ASTM C494, Type F and Type G, depending on dosage used.

Technical Properties @ 25°C:

Colour:	Pale yellowish to brownish liquid
Freezing point:	≈ -1°C
Specific gravity:	1.04 ± 0.02
pH:	6 - 7
Air entrainment:	Typically less than 2% additional air is entrained above control mix at normal dosages

Method of Use

Supaflo PC3100 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 Supaflo PC3100 to the concrete mix.

Dosage

The recommended dosage of Supaflo PC3100 is 0.5 - 1.5 litre per 100 kg of cementitious materials in the mix, including GGBFS, PFA or microsilica.

Representative trials should be conducted to determine the optimum dosage of Supaflo PC3100 to meet the performance requirements by using the materials and conditions in actual use.

Effects of Over Dosage

Overdosage of Supaflo PC3100 will cause the following:

- ▲ Significant increase in retardation.
- ▲ Increase in workability.

Ultimate concrete strength will not be adversely affected and will generally be increased provided that proper concrete curing is maintained.

Cleaning

Clean Supaflo PC3100 with fresh cold water.

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Packaging

Supaflo PC3100 is available in 20 kg pails and 225 kg drums supply.

Storage

Supaflo PC3100 has a shelf life of 12 months from date of manufacture if stored at temperatures between 2°C and 50°C.

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

Cautions

Health and Safety

Supaflo PC3100 is not classified as a hazardous material. Supaflo PC3100 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

Supaflo PC3100 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.

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.

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