

Supaflo PC440

High performance concrete superplasticizer



Description

Supaflo PC440 is a high performance super plasticising 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, to achieve highest concrete durability and performance.

Applications

- ▲ High strength and high performance concrete.
- ▲ Structures with congested reinforcement.
- ▲ Pre-cast concrete.
- ▲ Improved cohesion allow for use in mass concrete pours and piling.
- ▲ Self compacting concrete.

Advantages

- ▲ Optimises cement utilization.
- ▲ High density and impermeable concrete through very high water reduction.
- ▲ Improves shrinkage and creep behaviors.
- ▲ Minimises segregation and bleeding problems by improving cohesion.
- ▲ Higher early and ultimate compressive strengths.
- ▲ Increases durability and resistance to aggressive atmospheric conditions thorough reduced permeability.

Compatibility

Supaflo PC440 is suitable to use with all types of Portland cement and cement replacement materials. Supaflo PC440 should not be used in conjunction with other admixtures unless DCP technical department approval is obtained.

Standards

Supaflo PC440 complies with IS 9103:1999 and ASTM C494, Type A and G.

Technical Properties @ 25°C:

Colour:	Yellowish to brownish liquid
Freezing point:	≈ -1°C
Specific gravity:	1.06 ± 0.02
pH:	6 - 7
Air entrainment:	Typically less than 1.5% additional air is entrained above control mix at normal dosages

Method of Use

Supaflo PC440 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 PC440 to the concrete mix.

Dosage

The recommended dosage of Supaflo PC440 is 0.4 - 2.0 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 PC440 to meet the performance requirements by using the materials and conditions in actual use.

Effects of Over Dosage

Overdosage of Supaflo PC440 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 PC440 with fresh cold water.

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Packaging

Supaflo PC440 is available in 20 kg pails, 225 kg drums and 1000 litre bulks supply.

Storage

Supaflo PC440 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 PC440 is not classified as a hazardous material. Supaflo PC440 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 PC440 is nonflammable.

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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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