

Donplast PC145

High range water reducing admixture based on polycarboxylate polymers (Formerly known as Hyperplast PC145)



Description

Donplast PC145 is a high range water reducing admixture based on polycarboxylic polymers with selective additives which are especially formulated to enable the water content of the concrete to perform in a more effective manner.

This effect can be used in different concrete applications where it is required to keep the water-to-cement ratio at a minimum level while maintaining an excellent workability and strength performance.

Applications

Donplast PC145 is suitable for use in the following applications:

- ▲ Acts as high range water reducer for the production of high strength and high performance concrete.
- ▲ Can be also used as normal range water reducer for low and mid-rise constructions.
- ▲ Production of self-levelling concrete.
- ▲ Improves the cohesion of concrete used for mass concrete pours and piling.
- ▲ Structures with congested reinforcement.

Advantages

- ▲ Optimizes cement utilization.
- ▲ Can be used as high range and normal range water reducer depending on the used dosage.
- ▲ Improves the water impermeability characteristics of concrete mix.
- ▲ Significantly improves the slump retention characteristic without affecting the setting time.
- ▲ Increases the durability and resistance to aggressive atmospheric conditions.
- ▲ Significantly improves early and ultimate compressive strengths.
- ▲ Minimizes segregation and bleeding problems by improving the cohesion of concrete mixes.

Compatibility

Donplast PC145 is suitable to use with all types of Portland cement and cement replacement materials. Donplast PC145 should not be used in conjunction with other admixtures unless DCP's Technical Department approval is obtained.

Technical Properties @ 70°F (21°C):

Colour:	Yellowish to brownish liquid
Specific gravity:	1.04 ± 0.02
pH:	5 - 7
Chloride content:	Chloride-free

Standards

Donplast PC145 complies with the requirements of Specification for Chemical Admixture for Concrete ASTM C494 as a Type A and F admixture, depending on the used dosage.

Method of Use

Donplast PC145 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 PC145 to the concrete mix.

Dosage

The recommended dosage of Donplast PC145 is 11.5 to 23 fl oz/100 lb (750 - 1,500 ml/100 kg) of cement or cementitious materials in the mix including GGBFS, PFA or micro-silica.

Representative trials should be first conducted to determine the optimum dosage of Donplast PC145 to meet the performance requirements by using the materials and conditions in actual use.

Effects of Over Dosage

Overdosage of Donplast PC145 will cause the following:

- ▲ 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 Donplast PC145 with fresh cold water.

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Packaging

Donplast PC145 is available in 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 PC145 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).

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

Cautions

Health and Safety

Donplast PC145 is not classified as a hazardous material. Donplast PC145 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 PC145 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.

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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.

