

# Donplast PC221

High range water reducing admixture with workability retention properties (Formerly known as Hyperplast PC221)



## Description

Donplast PC221 is a high range water reducing admixture with slump retaining properties 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-cement ratio at a minimum level and to maintain both excellent workability and strength performance.

## Applications

Donplast PC221 can be successfully used in the following applications:

- ▲ Use in concrete where extended workability without retardation is required.
- ▲ Acts as high range water reducer for the production of high strength and high performance concrete.
- ▲ Suitable for normal weight and light weight concrete.
- ▲ In ready-mix, precast and pre-stressed applications.
- ▲ Production of self-levelling concrete.
- ▲ Mass-concrete pours.

## Advantages

- ▲ Increased compressive and flexural strength.
- ▲ Excellent slump retention.
- ▲ Optimizes cement utilization.
- ▲ Better durability and impermeable concrete.
- ▲ Improves shrinkage and creep behaviors.

## Compatibility

Donplast PC221 is suitable to use with all types of Portland cement and cement replacement materials. Donplast PC221 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:	1.05 ± 0.02
pH:	5 - 7
Chloride content:	Chloride-free

## Standards

Donplast PC221 complies with ASTM C494, Type A and F, depending on the used dosage.

## Method of Use

Donplast PC221 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 PC221 to the concrete mix.

## Dosage

The recommended dosage of Donplast PC221 is 8 to 23 fl oz/100 lb (522 - 1500 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 PC221 to meet the performance requirements by using the materials and conditions in actual use.

## Effects of Over Dosage

Overdosage of Donplast PC221 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.

# Donplast PC221

## Cleaning

Clean Donplast PC221 with fresh cold water.

## Packaging

Donplast PC221 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 PC221 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 PC221 is not classified as a hazardous material. Donplast PC221 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 PC221 is nonflammable.

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- ▲ 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.

