## Donplast PC155

High performance concrete superplasticiser



#### **DESCRIPTION**

Donplast PC155 is a high performance concrete superplasticizer admixture based on polycarboxylic 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.
- » Precast concrete.
- » Improved cohesion allows for use in mass concrete pours and piling.
- Can be used as a re-dosing admixture for improving workability without affecting setting time.

#### **ADVANTAGES**

- Optimises cement utilisation.
- » High density and impermeable concrete through extreme water reduction.
- > Improves shrinkage and creep behaviours.
- » Minimizes 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

Donplast PC155 is suitable to use with all types of Portland cement and cement replacement materials. Donplast PC155 should not be used in conjunction with other admixtures unless DCP Technical Department approval is obtained.

## STANDARDS

Donplast PC155 complies with EN 934-2:T3.1, T11.1, and ASTM C494, Type A and F, depending on dosage used.

#### **METHOD OF USE**

Donplast PC155 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 PC155 to the concrete mix.

## **TECHNICAL PROPERTIES @ 25°C:**

Colour: Yellowish liquid

Freezing point: -1°C

Specific gravity:  $1.04 \pm 0.02$ 

Chloride content: Nil

Typically less than 2% additional air is entrained

above control mix at normal

dosages

## Dosage

Air entrainment:

The recommended dosage of Donplast PC155 is 0.5 - 3.0 litres 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 Donplast PC155 to meet the performance requirements by using the materials and conditions in actual use.

#### **EFFECTS OF OVER DOSAGE**

Overdosage of Donplast PC155 will cause the following:

» Significant 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 PC155 with fresh cold water.

#### **PACKAGING**

Donplast PC155 is available in 25 litre pails, 210 litre drums and 1000 litre bulks supply.

#### **STORAGE**

Donplast PC155 has a shelf life of 18 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**

Donplast PC155 is not classified as a hazardous material. Donplast PC155 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 PC155 is nonflammable.

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#### 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.