

Donplast PC214

Water reducing admixture based on polycarboxylate polymers (Formerly known as Hyperplast PC214)



DESCRIPTION

Donplast PC214 is a water reducing admixture based on polycarboxylic polymers with selective additives which are specially formulated to enable the water content of the concrete to perform in a more effective manner.

This effect can be used to produce a high strength and flowable concrete mix at low water-to-cement ratio to achieve the highest durability and performance with minimal air entrainment effect on concrete mix.

APPLICATIONS

Donplast PC214 is suitable for use in the following applications:

- » Production of high strength and high performance concrete.
- » Suitable for normal weight and light weight concrete in ready-mix, precast and pre-stressed applications.
- » Improves the cohesion of concrete for use in mass concrete pours and piling.
- » Structures with congested reinforcement.
- » Production of self-levelling concrete.

ADVANTAGES

- » Optimizes cement utilization.
- » Improves the water impermeability characteristics of concrete mix.
- » Increases the durability and resistance to aggressive atmospheric conditions.
- » Significantly improves the early and ultimate compressive strengths.
- » Minimizes segregation and bleeding problems by improving the cohesion of concrete mixes.

COMPATIBILITY

Donplast PC214 is suitable to use with all types of Portland cement and cement replacement materials. Donplast PC214 should not be used in conjunction with other admixtures unless DCP's Technical Department approval is obtained.

STANDARDS

Donplast PC214 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.

TECHNICAL PROPERTIES @ 70°F (21°C):

Colour:	Yellowish to brownish liquid
Specific gravity:	1.07 ± 0.02
pH:	5 - 7
Chloride content:	Chloride-free

METHOD OF USE

Donplast PC214 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 PC214 to the concrete mix.

DOSAGE

Dosage rates will vary depending on the material used, ambient conditions and the requirements of a specific project. For general concreting applications and compliance with ASTM C494 Type A, Donplast PC214 recommended dosage is 4.6 to 6.9 fl oz/100 lb (300 - 450 ml/100 kg) of cement or cementitious materials in the mix including GGBFS, PFA or micro-silica.

For compliance with ASTM C494 Type F, Donplast PC214 recommended dosage is 8.4 to 13 fl oz/100 lb (550 - 850 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 PC214 to meet the performance requirements by using the materials and conditions in actual use.

EFFECTS OF OVER DOSAGE

Overdosage of Donplast PC214 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 Donplast PC214 with fresh cold water.



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PACKAGING

Donplast PC214 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 PC214 has a minimum 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 PC214 is not classified as a hazardous material. Donplast PC214 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 PC214 is nonflammable.

WARRANTY

Unless expressly stated otherwise in the Sales Documents, the Limited Warranty shall expire on the expiry date listed on the Product's label or packaging. The full text of DCP's limited warranty is found in DCP's standard terms and conditions of sale (the "Terms"), which are available at [DCP Website/USA – Terms & Conditions](#). DCP's limited warranty is in all cases subject to, and conditioned upon, the Terms.

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.

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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.

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