

# Hyperplast PC178

High performance polycarboxylic ether based superplasticiser



## DESCRIPTION

Hyperplast PC178 is a high performance superplasticising 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.
- » Improved cohesion allow for use in mass concrete pours and piling.

## ADVANTAGES

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

## COMPATIBILITY

Hyperplast PC178 can be used with all types of Portland cement and cement replacement materials. Hyperplast PC178 should not be used in conjunction with other admixtures unless DCP Technical Department approval is obtained.

## STANDARDS

Hyperplast PC178 complies with ASTM C494, Type A & F, depending on dosage used and BS EN 934-2.

## METHOD OF USE

Hyperplast PC178 should be added to the concrete with the mixing water to achieve optimum performance.

Automatic dispenser should be used to dispense the correct quantity of Hyperplast PC178 to the concrete mix.

## TECHNICAL PROPERTIES @ 25°C:

Colour:	Brownish liquid
Specific gravity:	1.05 ± 0.02
Freezing point:	≈ -1°C
Air entrainment:	Typically less than 2% additional air is entrained above control mix at normal dosages

## DOSAGE

The guidance dosage of Hyperplast PC178 is 0.5 - 3.0 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 Hyperplast PC178 to meet the performance requirements by using the materials and conditions in actual use.

## EFFECTS OF OVER DOSAGE

Over dosing of Hyperplast PC178 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

Hyperplast PC178 can be washed with fresh cold water.

## PACKAGING

Hyperplast PC178 is available in 25 litre pails, 210 litre drums and 1000 litre bulks supply.

## STORAGE

Hyperplast PC178 shelf life is 12 months if stored at temperatures between 2°C and 50°C.

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



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## CAUTIONS

### HEALTH AND SAFETY

Hyperplast PC178 is not classified as a hazardous material. Hyperplast PC178 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

Hyperplast PC178 is nonflammable.

## 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.

#### 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.