



# Hyperplast ES270

High performance early strength concrete superplasticiser (Formerly known as Flocrete PC270)

## Description

Hyperplast ES270 is a high performance early strength concrete super plasticising 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.
- ▲ Pre-cast concrete.
- ▲ Improved cohesion allow for use in mass concrete pours and piling.
- ▲ Self compacting concrete.

## Advantages

- ▲ Optimises cement utilization.
- ▲ High density and impermeable concrete through very high water reduction.
- ▲ Improves shrinkage and creep behaviors.
- ▲ Minimises 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

Hyperplast ES270 can be used with all types of Portland cement and cement replacement materials.

Hyperplast ES270 should not be used in conjunction with other admixtures unless DCP Technical Department approval is obtained.

## Standards

Hyperplast ES270 complies with ASTM C494, Type F and E, depending on dosage used.

## Method of Use

Hyperplast ES270 should be added to the concrete with the mixing water to achieve optimum performance.

## Technical Properties @ 25°C:

Colour:	Light yellow liquid
Freezing point:	≈ -11°C
Specific gravity:	1.12 ± 0.01
Air entrainment:	Typically less than 2% additional air is entrained above control mix at normal dosages

An automatic dispenser should be used to dispense the correct quantity of Hyperplast ES270 to the concrete mix.

## Dosage

The guidance dosage of Hyperplast ES270 is 0.5 - 3.0 litre/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 ES270 to meet the performance requirements by using the materials and conditions in actual use.

## Effects of Over Dosage

Over dosing of Hyperplast ES270 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 ES270 can be washed with fresh cold water.

## Packaging

Hyperplast ES270 is available in 25 litre pails, 210 litre drums and 1000 litre bulks supply.

# Hyperplast ES270

## Storage

Hyperplast ES270 has a shelf life of 12 months from date of manufacture if stored at temperatures between 2°C and 50°C.

If these conditions are exceeded, DCP Technical Department should be contacted for advice.

## Cautions

### Health and Safety

Hyperplast ES270 is not classified as hazardous material. Hyperplast ES270 should not come into contact with skin and eyes.

In case of contact with eyes wash immediately with plenty of water and seek medical advice promptly.

For further information refer to the Material Safety Data Sheet.

## Fire

Hyperplast ES270 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.

 expertise

 quality

 full range

[www.dcp-int.com](http://www.dcp-int.com)