# Hyperplast PC343

High performance concrete admixture based on polycarboxylic polymers



# Description

Hyperplast PC343 is a high performance super plasticizing admixture based on polycarboxylic polymers with long chains specially designed for use in plain cement concrete (PCC) and early strength precast elements, to enable the water content of the concrete to perform more effectively.

This effect can also be used in high strength concrete and flowable concrete mixes, to achieve highest concrete durability and performance.

# Applications

- ▲ To produce high quality concrete of improved durability and water tightness.
- → High strength and high performance concrete.
- ▲ Improved cohesion allow for use in mass concrete pours and piling.
- ▲ For use in PCC applications such as in airport runways and taxiways.

# **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 PC343 can be used with all types of Portland cement and cement replacement materials. Hyperplast PC343 should not be used in conjunction with other admixtures unless DCP Technical Department approval is obtained.

## **Standards**

Hyperplast PC343 complies with ASTM C494, Type F.

# Technical Properties @ 25°C:

Colour: Yellowish to brownish liquid

Freezing point:  $\approx -3^{\circ}C$ 

Specific gravity:  $1.04 \pm 0.02$ 

Chloride content: Nil

Typically less than 2% additional air is entrained

above control mix at normal

dosages

## Method of Use

Air entrainment:

Hyperplast PC343 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 Hyperplast PC343 to the concrete mix.

## Dosage

The recommended dosage of Hyperplast PC343 is 0.5 - 2.5 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 PC343 to meet the performance requirements by using the materials and conditions in actual use.

#### Effects of Over Dosage

Overdosage of Hyperplast PC343 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.

## Cleaning

Clean Hyperplast PC343 with fresh cold water.

# Hyperplast PC343

## **Packaging**

Hyperplast PC343 is available in 25 litre pails, 210 litre drums and 1000 litre bulks supply.

#### Storage

Hyperplast PC343 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, contact DCP Technical Department for advice.

## **Cautions**

# Health and Safety

Hyperplast PC343 is not classified as a hazardous material. Hyperplast PC343 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 PC343 is nonflammable.

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Note:

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