## Flocrete R666

Retarding and water reducing admixture



## Description

Flocrete R666 is formulated from selected polymers specially designed to enable the water content of the concrete to perform more effectively. This effect can be used to improve workability, to increase ultimate strengths or to facilitate a reduction in the cement content while sustaining and improving mix properties.

Flocrete R666 has retarding properties; this effect can be used in concrete where high cement content or high temperatures are involved, or where extended setting time is required.

## **Applications**

- ▲ Hot weather concreting.
- ▲ Where workability retention or retardation are required.
- ▲ For Roller Compacted Concrete (RCC).

#### **Advantages**

- ▲ Improved workability reduces placing and compaction problems.
- ▲ Workability retention for long distance concreting.
- ▲ Cold joints can be avoided by extending initial and final concrete setting time.
- ▲ Cement saving without affecting strength.
- ▲ More durable concrete as a result of reduction in permeability and lower water to cement ratio.

## Compatibility

Flocrete R666 can be used with all types of Portland cement and cement replacement materials. Flocrete R666 is compatible with other DCP admixtures used in the same concrete mix.

If more than one type of admixture is to be used in concrete mix, they must be dispensed to the concrete separately.

#### **Standards**

Flocrete R666 complies with ASTM C494, Type D, IS 9103:99 and BS 5075, Part 1:1982.

## Technical Properties:

Colour: Straw liquid

Specific gravity:  $1.08 \pm 0.02$  @  $27^{\circ}$ C

Chloride content: Nil

Typically less than 2%

Air entrainment: additional air is entrained above control mix at normal

dosages

#### Method of Use

Flocrete R666 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 Flocrete R666 to the concrete mix.

#### Dosage

The guidance dosage of Flocrete R666 is 0.10 - 0.55 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 Flocrete R666 to meet the performance requirements by using the materials and conditions in actual use.

#### Effects of Over Dosage

Over dosing of Flocrete R666 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.

## **Setting Time**

Although the setting time is dependent on the dosage of Flocrete R666, the following factors should be considered:

- i. Retardation is increased with a lower level of tricalcium aluminate in the cement.
- ii. Lower temperatures will delay the setting time.

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- iii. SRC cement gives higher retardation level than ordinary cement.
- iv. Using more than one type of admixture in the same concrete mix could affect the setting time.
- v. Retardation level is increased when cement replacement materials are used in the concrete mix.

## Cleaning

Flocrete R666 can be washed with fresh cold water.

#### **Packaging**

Flocrete R666 is available in 225 kg drums and 1000 litre bulks supply.

#### Storage

Flocrete R666 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

Flocrete R666 is not classified as hazardous material. Flocrete R666 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

Flocrete R666 is nonflammable.

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- ▲ 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.

