# Flocrete W52

High range concrete superplasticiser and permeability reducing admixture



## Description

Flocrete W52 is a high performance liquid concrete admixture formulated from selected polymers specially designed to enable the water content of the concrete to perform more effectively. This effect can be used to reduce permeability, improve workability and to increase ultimate strengths with very high levels of water reduction in the concrete mix.

## Applications

- ▲ To produce high quality concrete of improved durability by reducing permeability.
- ▲ To increase workability retention of fresh concrete.
- ▲ To provide increased ultimate strength gain by reducing water demand in concrete mixes.

## **Advantages**

- ▲ More durable concrete as a result of reduction in permeability and lower water to cement ratio.
- ▲ Higher strength with same cement content.
- ▲ Minimizing segregation problems by improving cohesion.
- ▲ Improved workability reduces placing and compaction problems.
- ▲ Cement saving without affecting strength.
- ▲ Chloride free.

## Compatibility

Flocrete W52 can be used with all types of Portland cement and cement replacement materials. Flocrete W52 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 W52 complies with ASTM C494, Type B, D and G, depending on dosage used.

#### Method of Use

Flocrete W52 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 Flocrete W52 to the concrete mix.

## Technical Properties @ 25°C:

Color: Brown liquid

Freezing point: ≈ -2°C

Specific gravity:  $1.19 \pm 0.01$ 

Chloride content:

BS5075

Nil

Typically less than 2% additional air is entrained

Air entrainment: above control mix at normal

dosages

#### Dosage

The guidance dosage of Flocrete W52 is 1.00 - 2.40 litres/ 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 W52 to meet the performance requirements by using the materials and conditions in actual use.

### Effects of Over Dosage

Over dosing of Flocrete W52 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 W52, the following factors should be considered:

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

# Flocrete W52

#### Cleaning

Flocrete W52 can be washed with fresh cold water.

## **Packaging**

Flocrete W52 is available in 25 litres pails, 210 litres drums and 1000 litres bulks supply.

### Storage

Flocrete W52 shelf life is 12 months 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 W52 is not classified as hazardous material. Flocrete W52 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 W52 is non-flammable.

#### More from Don Construction Products

A wide range of construction chemicals products are manufactured by DCP which include:

- ▲ Concrete admixtures.
- ▲ Grouts and chemical fixings.
- ▲ Concrete repairs.
- ▲ Industrial floorings.
- ▲ Structural protection.

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