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.

Technical Properties @ 25°C:

Colour: Brown liquid

Freezing point: $\approx -2^{\circ}C$

Specific gravity: 1.21 ± 0.02

Chloride content:

Air entrainment:

BS 5075

Nil

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 Flocrete W52 to the concrete mix.

Dosage

The guidance dosage of Flocrete W52 is 1.00 - 2.40 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 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.

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- 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 W52 can be washed with fresh cold water.

Packaging

Flocrete W52 is available in 25 litre jerrycan, 210 litre drums and 1000 litre bulks supply.

Storage

Flocrete W52 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 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 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 endeavor to ensure that any advice, recommendation or information we may give in product literature is accurate and correct. However, due to the fact that we have no direct or continuous control over where or how the products are applied, DCP cannot accept any liability either directly or indirectly arising from the use of DCP products, whether or not in accordance with any advice, specification, recommendation or information given by us.