

Motorflo Bond-B

Admixture for concrete in the paving and masonry block industry

Uses

- To improve the effectiveness of the water content of a concrete mix.
- At higher dosages to provide a cost effective means of reducing concrete permeability and thereby reducing water penetration.
- To improve the quality and consistency of concrete products produced by modern paving and masonry block machines.
- To provide smoother, faster machine operation and increase product strength.

Advantages

- ✚ Allows specified strength grades to be met at reduced cement content or increased workability.
- ✚ Water reduction significantly improves compressive strengths at all ages and enhances durability through the production of low permeability concrete.
- ✚ Minimizes the risk of segregation and bleeding and assists in the production of a dense, close textured
- ✚ Surface, improving durability.
- ✚ Breakages reduced due to increased compressive strength at early ages.

Standards compliance

Motorflo Bond-B complies with BS 5075 Part 1 and with ASTM C494 as Type A.

Description

Motorflo Bond-B is a chloride free water reducing admixture supplied as a brown solution which instantly disperses in water.

Motorflo Bond-B disperses the fine particles in the concrete mix, enabling the water content of the concrete to perform more effectively and improving the consistency of the concrete. This produces higher levels of workability for the same water content, allowing benefits such as water reduction and increased strengths to be taken.

Dosage

The optimum dosage of Motorflo Bond-B to meet specific requirements should always be determined by trials using the materials and conditions that will be experienced in use.

The normal dosage range is 0.4 to 1.0 litres/100 kg of cementitious material.

Use at other dosages

Dosages outside the normal ranges quoted above can be used to meet particular mix requirements.

Effects of overdosing

An overdose of double the intended amount of Motorflo Bond-B will result in an increase in retardation as compared to that normally obtained at the intended dosage.

Provided that adequate curing is maintained, the ultimate strength of the concrete will not be impaired by increased retardation and will generally be increased. The effects of overdosing will be further increased if sulphate resisting cement or cement replacement materials are used.

Properties

Appearance : Brown liquid

Specific gravity : Typically 1.165 at 20°C

Chloride content : Nil to BS 5075

Air entrainment : Typically less than 2% additional air is entrained at normal dosages.

Alkali content : Typically less than 5.0 g. Na₂O equivalent/litre of admixture. A fact sheet on this subject is available.

Freezing point: Approximately -3°C

Precautions

Health and safety

Motorflo Bond-B does not fall into the hazard classifications.. However, it should not be swallowed or allowed to come into contact with skin and eyes. Suitable protective gloves and goggles should be worn.

Splashes on the skin should be removed with water. In case of contact with eyes rinse immediately with plenty of water and seek medical advice. If swallowed seek medical attention immediately - do not induce vomiting.

Fire

Motorflo Bond-B is water based and non-flammable.