Concrete Admixtures - High Range Water Reducers

EUNICEM 150B

Concrete superplasticizer





Product Description

EUNICEM 150B is a high performance superplasticizer designed specifically to impart high work ability to all types of concrete, including microsilica concrete, while possessing excellent slump retention properties. It can also be used in normal concrete mix designs where high workability is required for long periods, to aid placement, such as piling concrete and congested areas of reinforcement.

EUNICEM 150B is based on selected raw materials and is manufactured under controlled conditions to give a consistent product. It is formulated from specially designed polymeric sulphonate materials and naturally derived products.

Depending on the addition rate, EUNICEM 150B will conform to Type A, F, D and G materials of ASTM designation C494 and complies with BS 5075 Part I and III.

Advantages

- Effective over a wide range of cement contents and w/c ratios.
- Aids concrete cohesion.
- Imparts excellent slump retention over prolonged periods of time.
- Allows greater time for placement and compaction, especially in concrete containing microsilica.
- Can be used to achieve large water reductions in concrete, to obtain high early and ultimate compressive strength gains, as required inprecast/prestressed concretes.

Typical Properties

Appearance: Dark brown liquid. Specific Gravity: 1.20±0.02 at 20°C.

Air Entrainment: Nil. Chloride content: Nil.

Storage Life in Manufacturer's Drums:12 months

from date of manufacture. Storage Life Bulk Storage: 12 months from date

Compatibility

of delivery.

With cements: EUNICEM 150B can be used with all types of Portland, Pozzolanic and Blast Furnace cements. It can also be used in concrete mixes containing fly ash, and/or microsilica. With other admixtures: EUNICEM 150B should not be premixed with other admixtures. The performance of the material may be affected by the presence of other chemicals and we would recommend that all admixtures be added separately to the mix.

Method of Use

EUNICEM 150B is supplied ready for use. It should be added to the concrete mixing process at the same time as the water. It should not be added directly to the cement. For mixes containing microsilica, EUNICEM 150B should be incorporated into the mix after the addition of the microsilica, at the same time as the mix water. EUNICEM 150B should not be added to slurrified microsilica before addition to the mix.

Addition Rates Range

0.4% - 3% by weight of cement. The performance of EUNICEM 150B is best assessed after preliminary trials in the laboratory or on site, using the actual mix constituents under consideration, to determine the optimum dosage and effect on concrete properties such as compressive strength, setting times, and workability retention, when these are of consequence.

As a guide to these trials, an addition rate of 400ml - 3000ml EUNICEM 150B per 100 kg cement is recommended. But lower dosage

levels may be feasible following trials mixes and depending on w/c ratios.

Effects of Overdosing

Overdosing of EUNICEM 150B will generally produce an increase in workability and a slight increase in air entrainment, which will be accompanied by a delay in the concrete setting time. However, provided the overdosed concrete is cured properly, the ultimate strength will generally be higher than normal concrete. The effects of overdosing with respect to set retardation are increased when sulphate resisting cement is used in the mix.

Dispensing

It is preferable that liquid admixtures for concrete should be introduced into a mixer by means of automatic dispensing equipment details of which are available upon request.

Health and Safety

For further information see the EUNICEM 150B Material Safety Data Sheet.

Packaging

EUNICEM 150B is supplied in 1000 litercontainers

Alternatively, bulk deliveries can be arranged.

Storage

EUNICEM150B requires no special storage facilities.

Technical Service

The Technical Department is available to assist you in the correct use of our products and its resources are at your disposal entirely without obligation.

Contact Information

Al-Faiha for Engineering Products techsupport@alfaihaengineering.com www.alfaihaengineering.com

v01-02-2022