Concrete Admixtures - High Range Water Reducers

EUNICEM DA

Concrete superplasticizer





Product Description

EUNICEM DA is a new Superplasticizer designed to impact extremely high workability to concrete enabling large or difficult pours to be made. It is a versatile product covering a wide range of applicational requirements.

EUNICEM DA is preferably used in ready-made concrete.

EUNICEM DA is wholly synthetic and is manufactured under closely controlled conditions to give a consistent product.

EUNICEM DA conforms to the requirements of ASTM C494 type G and complies with BS 5075 Part 3.

Advantages

- Substantial increases in workability can be obtained by direct addition of EUNICEM DA.
- Providing suitable mix designs are employed, super plasticized concretes remain cohesive.
- Normal pump mixes are recommended for this application.
- EUNICEM DA can be used to effect high range water reductions.
- Leading to considerable increases in compressive strength.
- Impermeability and durability are correspondingly improved.

Typical Properties

Appearance:

Light brown liquid.

Specific Gravity:

 1.16 ± 0.02 at 20°C.

Air Entrainment:

Nil.

Chloride Content:

Nil.

Freezing Point

0°C

Storage Life in Manufacturer's Drums: 12 months

from date of manufacture.

Bulk Storage: 12 months from date of delivery.

Compatibility

With cements:

EUNICEM DA is compatible with all Portland, Pozzolanic and blast furnace cements. It is also compatible with concrete containing fly ash and or silica fume.

With other admixtures:

EUNICEM DA should not be premixed with other admixtures since the performance of this material may be affected as a result of this.

Method of Use

EUNICEM DA is supplied ready for use .if high slump concrete is being manufactured using low water cement ratio, then the addition of EUNICEM DA should be made to concrete mixes either during the mixing cycle or at the same time as the water .

Addition Rates Range

Range: Range: 1000ml-3500 ml per 100Kg cement. (1% - 3.5% lv/w) by weight of cement).

As with most products of this type the magnitude of the effect obtained with EUNICEM DA is governed by the quantity of product used and the specific nature of the concrete and its constituent materials.

It is necessary therefore, to assess performance under site conditions using site materials to determine optimum dosage and effect on both plastic and hardened concrete properties, such as cohesiveness, slump retention, set retardation, early rate of strength gain, ultimate compressive strength and shrinkage when these are of consequence.

As a guide to these trails an addition rate of 1.0% - 2.0 % by weight of cement is recommended for advice and assistance with your trials we recommend that you consult our technical department.

Addition rates outside the recommended dosage range may be used for special concrete applications. This may be the situation when microsilica or Blast Furnace Slag Cement is used. In such circumstances it is important to conduct preliminary trials on the actual mix constituents to assess the effect on the properties of the concrete, at the dosage level specified. For advice and assistance with your trials we would recommend that you consult ECA.

Effects of Overdosing

The effects of overdosing of EUNICEM DA is a function of the overdosed amount when producing high workability concrete overdosing will increase the level of workability and may induce the onset segregation depending on the extent of the overdose. An increase in setting time may also occur, especially with low temperatures and in cases where blast furnace or fly ash is used .In any situation where overdose is suspected, a careful inspection of the concrete in its state should be conducted. Particular attention should be paid to consistency and cohesion, prior to a decision on the suitability of the concrete for the particular application in question.

Dispensing

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

Health and Safety

For further information see the EUNICEM DA Material Safety Data Sheet or European Concrete Additives.

Packaging

EUNICEM DA is supplied in 1000 liter return-able containers. Alternatively, bulk deliveries can be arranged.

Storage

EUNICEM DA should preferably be stored protected from frost. If the product does become frozen it should be carefully mixed after thawing out to restore it to its normal state.

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

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