Concrete Admixtures - Foaming Agents

EUNIAIR AE4

Concrete foaming agent





Product Description

EUNIAIR AE4 is a liquid foaming agent for use in all types of mortar and concrete mixes. It is particularly designed for use in the production of foamed concrete and for use with synthetic and naturally occurring light-weight aggregates where the density of the fine aggregate/cement paste is normally required to be similar to that of the aggregate. EUNIAIR AE4 is formulated from carefully selected raw materials and is manufactured under controlled conditions to give consistent product. It is a blend of anionic surfactants.

Advantages

• EUNIAIR AE4 will entrain air into all types of concrete even those with highly angular crushed aggregates.

• It can be used with all types of lightweight aggregates to produce very low density concrete mixes.

• EUNIAIR AE4 can be employed to entrain air in mixes containing high proportions of pulverized fuel ash.

• An aqueous solution of EUNIAIR AE4 can be performed to give very stable foam for use in the production of foamed concrete.

Typical Properties

- Appearance: Pale straw colored liquid
- Specific Gravity: 1.03±0.02 at 20°C
- Chloride content: Nil
- Solubility in Water: Indefinite
- Freezing Point: Less than 0°C
- Storage Life in Manufacturer's Drums: 12
- months from date of manufacture
- Bulk Storage: 12 months from date of delivery Corrosiveness to Mild Steel: Nil

Compatibility

With cements: EUNIAIR AE4 can be used with all types of Portland cement including Sulphate Resisting Cements (SRC) and cement replacement materials.

With other admixtures: EUNIAIR AE4 should not be pre- mixed with other admixtures. The performance of the material may be affected by the presence of other chemicals.

Method of Use

EUNIAIR AE4 should not be pre- mixed with other admixtures. The performance of the material may be affected by the presence of other chemicals.

Addition Rates Range

The performance of EUNIAIR AE4 is best assessed after preliminary tests on site using the actual mix and the plant under consideration to determine the optimum dosage rate which will give the desired concrete properties. For foamed concrete/mortar a 5.0% -7.0% solution of EUNI-AIR AE4 is added usually via a foam tube. The quantity of foam added will determine the resultant density of the concrete/ mortar produced. Hence the volume of aqueous solution added is proportional to the concrete/mortar density required. Conventional mixing equipment can be used to produce foamed lightweight aggregate concretes. As a guide to trials an addition level of 200ml EUNIAIR AE4 per 50 kg cement should be evaluated. The air content of air entrained concrete should be regularly checked, and because of the absorptive nature of most lightweight aggregates, a gravimetric determination is most suitable.

Effects of Overdosing

As with all foaming agents, they are air entraining agents. EUNIAIR AE4 in any given mix will proportionately reduce compressive strength as the level of entrained air is increased. Overdosing with EUNIAIR AE4 will normally produce an increase in air content and workability, together with a loss in ultimate compressive strength.

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 EUNIAIR AE4 Material Safety Data Sheet, or consult European Concrete Additives.

Packaging

EUNIAIR AE4 is supplied in 1000 liter containers. Alternatively, bulk deliveries can be arranged.

Storage

EUNIAIR AE4 should be stored in conventional sealed containers and protected from the elements.

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

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