Concrete Admixtures - Air Entrainers

EUNIAIR AE3

Air entraining agent





Product Description

EUNIAIR AE3 is a liquid air entraining agent for use in the production of air entrained concretes and cementitious compositions. EUNIAIR AE3 is formulated from carefully selected raw materials and is manufactured under controlled conditions to give a consistent product. It is based on the salt of an ether sulphate and conforms to ASTM C260 for air entraining admixtures.

Advantages

- Improves resistance to freeze/thaw conditions
 Resistance to the disruptive action of de-icing salts and other liquids is improved.
- Cohesion of mixtures liable to segregation is improved.
- Bleeding of excessive mixing water is reduced.
- Entrained air is not readily lost from plastic concrete mixes on standing and prolonged mixing does not normally cause excessive over entrainment of air.
- EUNIAIR AE3 is particularly suitable for use in conjunction with concretes containing selected pulverized fuel ash.

Typical Properties

- Appearance: Pale yellow, sediment free
- Specific Gravity: 1.01±0.02 at 20°C
- Alkali Content: 1.61% as Na2O
- Sulphate Content: 0.70% as SO3
- Air Entrainment: See "Addition Rates"
- Chloride Content: Nil
- Freezing Point: -2°C
- Storage Life in Manufacturer's Drums: 12 months from date of manufacture
- Bulk Storage: 12 months from date of delivery

Compatibility

With cements: EUNIAIR AE3 can be used with all types of Portland cement including Sulphate

Resisting Cements (SRC). It is suitable for use with blended cements containing ground, granulated blast furnace slag. In addition, it can be used in concretes containing selected pulverized fuel ash.

With other admixtures: EUNIAIR AE3 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 admixtures be added separately into the mix.

Method of Use

EUNIAIR AE3 is supplied ready for use. It should be added to concrete mixes or mortar mixes during the mixing process at the same time as the water. When utilized as an air entraining agent for masonry cements, it should be metered on to the cement clinker prior to the grinding stage.

Addition Rates Range

0.06% - 0.4% by weight of cement. The performance of EUNIAIR AE3 is dependent on the characteristic of the concrete or mortar mix concerned, Together with the degree of air entrainment required.

Factors which can affect this are:

• Nature and grading of the aggregates, particularly fine aggregates.

- Cement content and type of cement used.
- Water/cement ratio.
- Workability of the mixture.
- Temperature.
- Type and efficiency of mixing equipment.
- Normal good site control gives excellent consistency of results.

It is essential that the final assessment of dosage should be made after the site trials. As a guide to these trials, an addition rate of 60ml - 90ml EUNIAIR AE3 per 100kg cement is recommended. For semi-dry mixes 280ml - 400ml EUNIAIR AE3 per 100kg cement is recommended. Where EUNIAIR AE3 is used in concretes containing pulverized fuel ash, the dosage rate could exceed the range quoted above. For advice and assistance with your trials we recommend that you consult our technical department.

Effects of Overdosing

Overdosing with EUNIAIR AE3 will normally produce an increase in air content and workability.

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 AE3 Material Safety Data Sheet, or consult European Concrete Additives.

Packaging

EUNIAIR AE3 is supplied in 1000 liter containers. Alternatively, bulk deliveries can be arranged.

Storage

EUNIAIR AE3 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

v01-02-2022