

EUNIFLOW 290

Concrete Superplasticizer



Product Description

EUNIFLOW 290 is a high efficiency liquid superplasticizer designed to improve the slump retaining properties of high workability ready mixed concrete. It is also specifically beneficial in yielding excellent workability retaining properties, when used in conjunction with EUNICOR DCIS Corrosion Inhibitor to enable large or difficult pours to be made. EUNIFLOW 290 is based on modified synthetic carboxylate polymers and is manufactured under controlled conditions to give a consistent product. EUNIFLOW 290 conforms to the requirements of ASTM C-494, Type A, F and G and to BS EN 9342.

Advantages

- High workability concrete can be obtained by incorporating EUNIFLOW 290 into a concrete mix designed for a 50mm slump.
- EUNIFLOW 290 can also be used to effect high range water reductions, resulting in increased compressive strength and durability.
- Providing suitable mix designs are employed, high workability concrete based on EUNIFLOW 290 will remain cohesive.
- EUNIFLOW 290 is dosage efficient.
- EUNIFLOW 290 can be used as a pumpability enhancer with a combined plasticizing effect.

Typical Properties

Appearance: Light Brown Liquid

Specific Gravity: 1.09 ± 0.02 at 20°C

Air Entrainment: 1% - 2% approximately

Chloride Content: Nil

Storage Life in Manufacturer's Package: 12 months from date of manufacture.

Storage Life in Bulk Storage: 12 months from date of delivery.

Compatibility

With cements: EUNIFLOW 290 can be used with all types of Portland Cements, including sulphate resisting cements. It is effective in concrete containing pulverized fuel ash or Ground Granulated Blast Furnace Slag.

With other admixtures: EUNIFLOW 290 should not be premixed under any circumstances with other admixtures. While some admixtures can be usefully combined within the same mix the performance of this product may well be affected by the presence of other chemicals and we recommend that European Concrete Additives be contacted for advice in all such circumstances.

Method of Use

EUNIFLOW 290 is supplied ready for use. When producing high workability concrete it should be added in its supplied form to the batching water prior to the addition of the cementitious components. Addition of any further chemical admixtures should be undertaken separately. After the addition of the cement, a further mixing cycle of at least 2 minutes is recommended to enable EUNIFLOW 290 to efficiently disperse the mix components.

Addition Rates Range

800ml - 3000ml per 100kg cement (0.8% - 3% [v/w] by weight of cement) as with most products of this type, the magnitude of the effect obtained with EUNIFLOW 290 is governed by the quantity of product used, water cementitious ratio and specific nature of the concrete and constituent materials. It is necessary therefore to assess performance under site conditions using site materials to determine optimum performance and dosage.

The effect on plastic and hardened concrete properties should be measured such as workability

ty retention, set characteristics, early rate of strength gain, ultimate compressive strength and shrinkage when these are of consequence.

Effects of Overdosing

The effect of overdosing EUNIFLOW 290 is a function of the degree of overdose. When concrete has been produced which has been overdosed the level of workability will increase and may in certain situations lead to the onset of segregation. Depending on the extent of the overdose and the constituent materials in the mix an increase in setting time may also occur. In any situations where overdosing is suspected, a careful inspection of the concrete in its plastic state should be conducted, 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 the mixer by means of automatic dispensing equipment. Such equipment is available from European Concrete Additives and details are available upon request.

Health and Safety

See EUNIFLOW 290 is formulated from chemicals which present no fire or health hazards. For further Information see EUNIFLOW 290 Material Safety Data Sheet or consult our technical department.

Packaging

EUNIFLOW 290 is supplied in 1000 liter free, nonreturnable containers. Alternatively, bulk deliveries can be arranged.

Storage

EUNIFLOW290 should be stored in original containers or suitable closed tanks, preferably out of direct sunlight and protected from extremes of temperature.

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