

EUNIFLOW 260

High performance concrete superplasticizer for extended workability



Product Description

EUNIFLOW 260 Superplasticizer is a high range water-reducing admixture for high strength concrete. EUNIFLOW 260 superplasticizer is based on a synthetic carboxylate polymer and is manufactured under closely controlled conditions to give a consistent product. It contains no added chloride. EUNIFLOW 260 superplasticizer is formulated to comply with Standard Specification for Chemical Admixtures for Concrete, ASTM C 494, Type G material and BS 5075, Part III.

Advantages

- EUNIFLOW 260 superplasticizer is highly efficient, producing high slump concrete at low dosage with no loss in strength.
- EUNIFLOW 260 is added to concrete mix water for rapid batching.
- Plastic concrete exhibits high cohesion, fluidity and flow ability. Concrete with EUNIFLOW 260 will maintain slump properties in excess of two hours, even at high ambient temperatures.
- Addition of EUNIFLOW 260 to plain concrete will allow water reduction of up to 30%.
- Low water/cement ratio leads to excellent durability of concrete.
- Good surface finish, providing highly aesthetic concrete appearance.

Uses

EUNIFLOW 260 superplasticizer has been developed to allow concrete to attain particularly high performance in both the plastic and the hardened states. It is particularly useful for imparting exceptional workability characteristics to concrete mixes so that large or difficult pours can be made, whilst maintaining excellent slump retention properties especially in hot climatic conditions. It also allows flowable concrete to

be produced with very low water/cement ratios to achieve higher strengths.

Typical Properties

Appearance: Amber liquid

Specific Gravity: 1.10 ± 0.02 at 20°C

Air Entrainment: 1.0% approx.

Chloride Content: Nil

Storage life in manufacturer's Drums: 12 months from date of manufacture.

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

Dispersion

EUNIFLOW 260 superplasticizer is a superior dispersing admixture having a marked capacity to disperse the cement agglomerates normally found in a cement-water suspension. This capability exceeds that of normal high-range water reducing admixtures, resulting in lower dosages and better control.

Compatibility

With cements: EUNIFLOW 260 can be used with all types of Portland Cements, including Sulphate Resisting Cements.

With other admixtures: EUNIFLOW 260 is fully compatible with other products normally used in concrete – including air entraining agents, retarders or accelerators, silica fume admixtures, Eclipse™ Eunisrinkage Reducing Admixture, ECA POLYFIBER and EUNICOR DCIS Corrosion Inhibitor – without impeding their performance. EUNIFLOW 260 should not be used in combination with NSFC and MSFC superplasticizers. Most Type A water reducers or Type D water-reducing retarders are compatible with EUNIFLOW 260 superplasticizer as long as they are separately added to the concrete. Caution should be

exercised when using EUNIFLOW 260 superplasticizer together with a retarder, as excessive retardation can occur if the admixture dosages are too high. Pre-testing of the concrete should be performed to optimize dosages and addition times of these admixtures. The admixture should not contact each other before they enter the concrete.

Method of Use

EUNIFLOW 260 superplasticizer is supplied ready for use. When producing high workability concrete it can be added in its supplied form to the batching water, prior to the addition of the cementitious component. After the addition of cement, a further mixing cycle of at least 2 minutes is recommended to enable EUNIFLOW 260 to efficiently disperse the mix components.

Addition Rates Range

400ml – 3000ml per 100kg cement. (0.4% - 3.0% [v/w] by weight of cement). Addition rates of EUNIFLOW 260 superplasticizer can vary with the type of application. As with most products of this type, the magnitude of the effect obtained with EUNIFLOW 260 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, workability retention, set characteristics, early rate of strength gain, ultimate compressive strength and shrinkage when these are of consequence. As a guide to these trials, an addition level of 0.8% - 1.2% EUNIFLOW 260 volume / weight of cement is recommended.

Effects of Overdosing

The effects of over-dosing EUNIFLOW 260 are a function of the degree of over-dose. When producing high workability concrete, overdosing will increase the level of workability and may induce the onset of segregation. Depending on the extent of the over-dose, an increase in the setting time will also occur, especially in low temperatures and/or when employing sulphate resisting cement or cement replacement materials.

Dispensing

It is preferable that liquid admixtures for concrete should be introduced into a mixer by means of automatic dispensing equipment. Such equipment is available from European Concrete Additives and details will be supplied on request.

Health and Safety

See EUNIFLOW 260 Material Safety Data Sheet, or consult our technical department.

Packaging

EUNIFLOW 260 is supplied in 1000-liter returnable containers. Alternatively, bulk deliveries can be arranged.

Storage

EUNIFLOW 260 superplasticizer contains no flammable ingredients. It will begin to freeze at approximately 0°C (32F), but will return to full strength after thawing and thorough agitation. In storage, and for proper dispensing, EUNIFLOW 260 superplasticizer should be maintained at temperatures above 0°C (32F).

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