# **Concrete Admixtures - Polycarboxylate Superplasticizers**

# **EUNIFLOW 250 M**

High early strength concrete superplasticizer





### **Product Description**

EUNIFLOW 250 M is a high performance superplasticising admixture based on modified polycarboxylate ether polymers that has been developed to enhance early age strength development of concrete.

It is an extremely versatile and flexible product, and is effective over a wide range of cement contents and types. It can be employed to effect large water reductions or impart extreme workability to concrete, enabling large or difficult pours to be made, whilst accelerating early strength development.

EUNIFLOW 250 M is formulated from carefully selected raw materials, and is manufactured under controlled conditions to give a consistent product. EUNIFLOW250 M superplasticizer is manufactured to comply with Standard Specification for Chemical Admixtures for Concrete, ASTM C 494 type A,F.

#### **Advantages**

- Mixes remain cohesive, when using EUNI-FLOW 250 M for high workability concrete, providing suitable mix designs are employed.
- Can be utilized in S.C.C. mix designs to effect improvements in early strength development, for precast concrete applications.
- EUNIFLOW 250 M is suitable for use in high workability concretes where accelerated setting and early age strength enhancement is required.
- Improves impermeability and durability of concrete.
- Particularly useful in precast concrete manufacture where early strength gains are required to optimize mould turn round times.
- Effective over a large ambient temperature range and can be utilized to effect reductions in form work stripping times.

# **Typical Properties**

Appearance: Light Brown

Specific Gravity: 1.07±0.02 @ 20°C

Air Entrainment: Minimal, increase 1% - 2%

approx.

Chloride Content: Nil

Storage Life in Manufacturers Drums: 12 months

from date of manufacture.

Storage Life Bulk Storage: 12 months from date

of delivery.

### Compatibility

With cements: EUNIFLOW 250M can be used with all types of Portland cement, including sulphate resisting cement. It is also effective in concrete containing mineral additives such as pulverised fuel ash, ground granulated blast furnace slag and microsilica.

For use with special cements we recommend that you consult our technical department. With Other Admixtures: EUNIFLOW 250M should not be mixed with any other admixture. The performance of the material may be affected by the presence of other chemicals and we would recommend that all admixtures be added separately to the mix.

# **Method of Use**

EUNIFLOW 250M is supplied ready for use. It should be added in its supplied form to concrete mixes preferably at the same time as the batching water, during the mixing cycle following the addition of aggregates and cement. EUNIFLOW 250M can also be added in its supplied form to a normal concrete mix a few minutes before a pour is to be made. In this situation a further mixing cycle of at least 2 minutes would be required to enable EUNIFLOW 250M to adequately disperse throughout

the mix. EUNIFLOW 250M should not be added directly to the cement.

# **Addition Rates Range**

800 ml - 3000 ml per 100 kg cement (0.8% - 3.0% [v/w] by weight of cement)
EUNIFLOW 250M is a versatile high performance product that benefits a wide variety of applications. As with most products of this type, the magnitude of the effect obtained by EUNIFLOW 250M 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 plant or site conditions using actual materials to determine optimum dosage and effect on both plastic and hardened concrete properties, such as cohesiveness, workability, early rate of strength gain etc.

As a guide to these trials an addition rate of 1.5% - 2.0% EUNIFLOW 250 M (v/w) 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. 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.

### **Effects of Overdosing**

The effects of overdosing EUNIFLOW 250M are a function of the degree of overdose. When producing high workability concrete, overdosing will increase the level of workability and may induce the onset of segregation. In any situation where overdosing is suspected, a careful inspection of the concrete in its plastic state should be conducted. Particular attention should be paid to consistency and cohesiveness, prior to a decision on the suitability of the concrete for its intended application.

#### **Dispensing**

It is preferable that liquid admixtures for concrete should be introduced into the mixer by means of automatic dispensing equipment details of which are available upon request.

### **Health and Safety**

For further information consult EUNIFLOW 250M material safety data sheet, or consult our technical department.

### **Packaging**

EUNIFLOW 250M is supplied in 1000 liter returnable tanks. Alternatively, bulk deliveries can be arranged.

#### **Storage**

EUNIFLOW 250M 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 Service 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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