

# EUNIFLOW 612i

High strength concrete superplasticizer



### Product Description

EUNIFLOW 612i is a high performance superplasticising admixture, water reducer high range with retarder that has been developed to enhance 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.

EUNIFLOW 612i is formulated from carefully selected raw materials, and is manufactured under controlled conditions to give a consistent product.

Confirm to standard ASTM C 494 type A, F and G.

### Advantages

- Mixes remain cohesive, when using EUNIFLOW 612i, 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 ready-mix concrete applications.
- EUNIFLOW 612i is suitable for use in high workability concretes.
- Improves impermeability and durability of concrete.
- Particularly useful in ready-mix concrete.
- Effective over a large ambient temperature range and can be utilized to effect reductions in form work stripping times.
- Classified as cold admixture and very good for using in hot weather concrete application.

### Typical Properties

Appearance: Light Brown

Specific Gravity: 1.09±0.02 at 20°C

Air Entrainment: Minimal, increase 1% - 2%

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.

### Compatibility

With cements: EUNIFLOW 612i 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 612i 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 612i 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 612i 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 612i to adequately disperse throughout the mix. EUNIFLOW 612i should not be added directly to the cement.

### **Addition Rates Range**

1000 ml - 3000 ml per 100 kg cement (1.0% - 3.0% [v/w] by weight of cement EUNIFLOW 612i 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 612i 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 612i (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 612i 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 612i material safety data sheet, or consult our technical department.

### **Packaging**

EUNIFLOW 612i is supplied in 1000 liter returnable tanks. Alternatively, bulk deliveries can be arranged.

### **Storage**

EUNIFLOW 612i 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 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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v01-02-2022