## **Concrete Fibers - Polypropylene Fibers**

# **ECA Polyfiber F6**

Polypropylene fibers 6mm





#### **Product Description**

ECA Polyfiber F6 is a high performance micro polypropylene fiber, 6 mm long, developed as a crack controlling additive for cementitious materials. It is used to inhibit the formation of small cracks that can occur through plastic shrinkage, premature drying and early thermal changes, in order to provide utilization of the intrinsic properties of the hardened cementitious material. ECA Polyfiber F6 is based on selected raw materials and manufactured under controlled conditions to give a consistent product. ECA Polyfiber F6, 6mm long fiber, is designed for cementitious mixes, exhibiting maximum aggregate sizes of 5mm or less. Uses specifically designed for crack control in cementitious materials covering areas such as ready-mix and site mixed mortars, grouts, repair compounds, conventional shotcrete, plaster mortar overlays, patch repairs etc.

#### Advantages

- Inhibits intrinsic cracking in concrete
- Disperses uniformly throughout the mix
- Improves finishing characteristics
- Improves concrete durability
- Increases impact and abrasion resistance
- Rustproof
- Impervious to alkali attack
- Reduced risk of subsequent damage

#### **Typical Properties**

Appearance: Polypropylene fiber Specific Gravity: 0.91 g/cm<sup>3</sup> Alkali Content: Nil Sulphate Content: Nil Air Entrainment: Air content of concrete will not be significantly increased. Chloride Content: Nil Constituents: Polypropylene C3H6 Fiber Length: 6mm long Fiber Thickness: 18 micron Specific Surface Area: 244 m<sup>2</sup> /kg Storage Life in Manufacturer's Bags: 12 months from date of manufacture

#### Compatibility

With Other Admixtures and Cements: ECA Polyfiber F6 can be used with all types of Portland cement and is compatible with other admixtures. Method of Use ECA Polyfiber F6 is supplied ready for use, and in measured quantities for addition to the mix either at the batching plant or on site. For site mixing, ECA Polyfiber F6 is available in bags of 125grams per 50kgs cement. For the optimum dispersion results, first introduce the sand into the site drum mixer, followed by ECA Polyfiber F6. After mixing for 2-4 minutes, add the cement and the required quantity of water and continue mixing to obtain a homogeneous mix.

#### **Specification Clause**

Cementitious mortars shall be manufactured using crack controlling additive such as ECA Polyfiber F6 as supplied by European Concrete Additives or a similar approved product. The crack controlling additive shall be based on a polypropylene fiber exhibiting fiber surface area of 244m<sup>2</sup>/kg with a nominal fiber thickness of 18 microns.

#### **Addition Rates**

The performance of ECA Polyfiber F6 is best assessed after preliminary trials in the laboratory, or on site using the actual mix constituents under consideration to determine the effect on its properties.

As a guide to trials, the following dosage levels of ECA Polyfiber F6 are recommended.

Product	ECA Polyfiber F6
Fiber Length	6mm
Aggregate Size	<5 mm
Dosage	0.25 kg/100kg cement
Typical Areas of Application	Rendering mortars Screeds

## **Effects of Overdosing**

Overdosing of ECA Polyfiber F6 will generally produce a reduction in workability, and an increase in the cohesiveness of the mix.

#### Health and Safety

For further information consult the ECA Polyfiber F6 Material Safety Data Sheet, or consult European Concrete Additives.

## Packaging

ECA Polyfiber F6 is available in 1kg bags and 125 gram bags (for site mixes). All bags are supplied over packed in cardboard box containers.

#### Storage

ECA Polyfiber F6 should be stored in dry conditions, similar to cement.

### **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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