



CRACK CONTROL FIBER FOR CONCRETE & MORTAR

Description:

POLYPROPYLENE MICRO FIBER is a 100% virgin polypropylene monofilament fiber designed to control plastic shrinkage cracking in concrete and mortar. It enhances durability, impact resistance and surface integrity.

Polypropylene fibers in sizes of 12 and 18 mm are used in the mixture with fiber concrete, and those in sizes of 6 mm are used in the mixture with mortars. These fibers are used to control and eliminate small cracks in concrete. For strengthening concrete floors subject to heavy machinery traffic, they should be used in conjunction with steel or concrete macro synthetic fiber PP fibers.

Technical Properties:

Material	Polypropylene
Color	White & Black
Fiber Length	6 – 12 – 18 mm
Diameter	18 – 40 micron
Tensile Strength	≥ 350 MPa
Melting Point	160 – 170 °C
Ignition Point	≥ 350 MPa
Density	0.90 g/cm ³
Acid Effect	Resistant
Cement Compatibility	Very good

Advantage:

- Reduces plastic shrinkage cracks.
- Improves impact and abrasion resistance.
- Enhances surface cohesion.
- Increased abrasion resistance in concrete floors.
- Reduces bleeding and segregation.
- Alkali resistant.
- Corrosion-free.

Area of Use:

- Ready-mix concrete.
- Precast concrete.
- Shotcrete.
- Plaster and repair mortars.
- Screeds and toppings.

Dosage:

Typical dosage: 0.6 – 1.0 kg/m³

Dosage may vary depending on mix design and project requirements.

When required, the Polystar Co. Technical Support Unit should be consulted.

Method of Application:

Add fibers directly into the concrete mixer during batching.

Mix for minimum 5 minutes to ensure uniform dispersion.

Standards:

- EN 14889-2
- ASTM C 1116

Precautions in Application:

- Concrete design and admixture dosage should be determined by prior laboratory tests, according to the desired concrete class and properties.

Packing:

- Individual Bag Weight: 20kg

**Storage and Shelf Life:**

Must be stored at temperatures between +5°C and +35°C. Under proper storing conditions, the product's shelf life is 36 months from production date if kept in original packaging unopened and undamaged. Packaged products must be shaken before use.

Security Information:

Use protective clothes, gloves, glasses and mask compatible with Health and Safety regulations during the application. It should not contact skin and eyes. In case it contacts to skin and eyes, rinse it with water and if swallowed ask for medical help. Food and beverage should not be allowed in the application area. It should be stored at the reach out of the children. The Material Safety Data Sheet (MSDS) should be read for detailed information.

