BEST CONSTRUCTION
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BESTFIBER -PPF

POLYPROPYLENE FIBER - REINFORCING FIBER FOR SHOTCRETE

PRODUCT PROPERTIES:

- Polypropylene fibre (short-cut strands of very fine denier monofilament) is added to the concrete during batching. Thousands of individual fibres are then evenly dispersed throughout the concrete during the mixing process creating a matrix-like structure.
- Improves concrete's resistance to plastic shrinkage cracking
- Inhibits formation of micro-cracks due to dimensional change
- Reduces sedimentation
- Increased cohesion of the mix
- No requirement for crack control steel mesh
- Concrete placement and crack control in ONE operation
- Reduced bleeding
- Mesh reinforcement
- Reduced settlement
- Easier finishing
- No delays to fast track schedule
- Easier positioning of joints
- Reduced site labour requirement
- No secondary steel mesh is required and reinforcement is automatically positioned
- Reduced frequency of plastic cracking
- Improved durability and reduced permeability
- Decreases risk of plastic settlement cracking over rebar

FIELDS OF APPLICATION:

- Most small builders, cash sales and DIY applications
- Internal floor-slabs (retail stores, warehouses, etc.)
- External slabs (driveways, yards, etc.)
- Agricultural applications
- Roads, pavements, driveways, kerbs
- Shotcrete; thin section walling
- Overlays and patch repair
- Water retaining structures, marine applications
- Security applications such as safes and strong rooms
- Deep lift walls

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Technical Data	
Type	POLYPROPYLENE FIBER
Colour	translucent white / black
Nominal x section area (mm2)	0.75
Melting point (°C)	150 – 170
Density (g/cm 3)	0.88 – 0.92
Fibre lengths (mm)	30, 40, 50
Tensile strength at yield, (Mpa)	240
Elongation at yield, (%)	24.4
Water absorption	0
Acid/alkali resistance	High
EFNARC plate test (joules)	800-900 @ 9 kg/m3
round determinate panel test (J)	±350 @ 9 kg/m3

DOSAGE AND BATCHING:

The fibres must be added to the concrete mixer after the water and admixtures.
Mix for at least 2-3 minutes to ensure even distribution in the mix. There will be a slight slump loss after addition of the fibres – do not add extra water but design the mix to allow for the addition of the fibres.
Typically 9 kg/m³ will produce an energy absorption of 700 Joules for an in-situ 35 MPa shotcrete. Site trials must however be carried out to determine the performance of the fibre and the shotcrete mix

STORAGE:

Material is very stable, no foreseen hazards. Protect against fire.

SAFETY PRECAUTIONS:

Product is extremely stable, presenting little hazard to health. However in fire conditions, carbon monoxide, carbon dioxide and other gases or fumes may be evolved.

Disclaimer:

The information in this data sheet is given to the best of our knowledge based on laboratory testing and practical experience. However, as the product is often used under conditions beyond our control, we cannot guarantee anything but the quality of the product itself. We reserve the right to change the given data without notice.