

MasterFiber 051

Synthetic fibrillated microfibre for the reduction of plastic shrinkage cracking and improved impact resistance of cementitious mixes

Material Description

MasterFiber 051 is a fibrillated microfibre made from 100% virgin polypropylene specifically engineered to be used for the reduction of plastic shrinkage cracks, and to improve impact resistance in cementitious applications. **MasterFiber 051** can be used in all concrete works where problems due to plastic shrinkage and/or inadequate curing cause cracking.

MasterFiber 051 conforms to the requirements of EN 14889.2 Class Ib.

Areas of Application

MasterFiber 051 applications include, but are not limited to:

- Slabs on ground: Pavements, and commercial floors
- Precast: Panels, sleepers, and aesthetic elements
- Extruded concrete: Jersey barriers

Characteristics & Benefits

- Improved green strength
- Enhances long-term durability
- Reduction in plastic shrinkage cracking
- Reduction in plastic settlement cracking
- Reduced segregation and improved cohesion
- Improved concrete toughness
- High bond with mortar compared to traditional microfibres
- Excellent finishability

Properties

Polymer type	Virgin polypropylene
Fibre type	Fibrillated (Class Ib)
Length	51 mm
Nominal diameter	40 µm
Ultimate tensile strength	450 MPa
Density	910 kg/m ³
Melting point	162°C
Absorption	Nil
Acid/alkali resistance	High

Dosing & batching

The typical dose rate for **MasterFiber 051** is 0.9 kg/m³. **MasterFiber 051** is packed in pre-weighed degradable bags that can be added directly to the concrete mixer. It is recommended to add fibre into a zone of sufficient shear to aid in fast fibre distribution through the mix.

After the addition of **MasterFiber 051** to the mix, it is recommended to mix for 3 to 5 minutes.

Packaging

MasterFiber 051 comes in pre-weighed 0.9 kg degradable bags to ensure optimum dosing and distribution.

1 box of **MasterFiber 051** contains 12 x 0.9 kg bags.

Storage

MasterFiber 051 should be stored undercover in a clean, dry area, protected from the weather. Use caution when stacking to avoid unstable conditions.

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Note

Field service support, where provided in no way constitutes supervisory responsibility. For additional information please contact your local Master Builders Solutions representative. MB Solutions reserves the right to have the true cause of any technical challenge determined by accepted test method.

Disclaimer

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NOTE

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