

MasterFiber M 018

Monofilament micro polypropylene fibre for concrete

Material Description

MasterFiber M 018 is a 100 percent virgin polypropylene, micro monofilament fibre designed to provide a high-performance concrete reinforcement system. MasterFiber M 018 is specifically engineered and manufactured to be used for the reduction of plastic shrinkage cracks, to improve impact, shatter, and abrasion resistance, to increase fatigue resistance, to increase toughness and provide long term fire durability of concrete and cement-based building products. MasterFiber M 018 meets the material specifications described in ASTM C-III6, Type III, Section 4.1.3 "Synthetic Fibre-Reinforced Concrete and Shotcrete".

Characteristics and Benefits

MasterFiber M 018 aids in the issues that arise from curing concrete by promoting a uniform bleed profile and controlling bleed water. By increasing the strain capacity of fresh concrete MasterFiber M 018 also minimises plastic shrinkage and plastic settlement in addition to:

- Increased impact, shatter, and abrasion resistance of concrete
- Increased fatigue resistance and concrete toughness
- Increased cohesion
- Reduced segregation
- Reduced freeze/thaw damage

Properties

Materials	100% virgin polypropylene
Fibre type	Micro monofilament
Fibre length	18mm
Absorption	Nil
Specific gravity	0.91
Tensile strength	450 MPa
Melting Point	162°C
Diameter	32 microns
Acid/salt	Resistant
Low alkali resistance	
Electrical conductivity low	
High thermal conductivity	

Application

The standard recommended dosage rate of MasterFiber M 018 is typically 0.6kg/m3 added directly to the concrete mixing system, during or after the batching of the other ingredients and mixed at the time and speed recommended by the mixer manufacturer (usually four to five minutes). Additional mixing does not adversely affect the distribution or overall performance of MasterFiber M 018. The addition of MasterFiber M 018 at the recommended dosage rates to a given mix will decrease the slump; however, additional water should not be added. A mid-range water reducer or superplasticiser should be used to provide the desired workability for placement. Contact your local Master Builders Solutions Technical Sales Representative for alternate dosage rates used in specialty applications.

Finishing

MasterFiber M 018 reinforced concrete can be finished by most finishing techniques. MasterFiber M 018 does not affect the finishing characteristics of concrete. MasterFiber M 018 is non-corrosive, alkali proof and will not stain the concrete surfaces. MasterFiber M 018 is compatible with power trowelled, hand trowelled, coloured and broom finished concrete.

Packaging

Bags	0.6kg Mulchable
Carton	35 Bags
Pallet	27 Cartons

Storage & Shelf Life

MasterFiber M 018 should be stored undercover and protected from the weather.



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Disclaimer

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STATEMENT OF RESPONSIBILITY

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