

MasterFiber F 018

Fibrillated micro polypropylene fibre for concrete

Material Description

MasterFiber F 018 is a 100 percent virgin polypropylene, micro fibrillated fibre designed to provide a high-performance concrete reinforcement system. **MasterFiber F 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, and to increase toughness of concrete and cement-based building products. **MasterFiber F 018** meets the material specifications described in ASTM C-1116, Type III, Section 4.1.3 "Synthetic Fibre-Reinforced Concrete and Shotcrete".

Characteristics and Benefits

MasterFiber F 018 aids in the issues that arise from curing concrete by promoting a uniform bleed profile and reducing bleed water. By increasing the strain capacity of fresh concrete **MasterFiber F 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 fibrillated
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 F 018** is typically 0.9kg/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 F 018**. The addition of **MasterFiber F 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 super-plasticiser 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 F 018 reinforced concrete can be finished by most finishing techniques. **MasterFiber F 018** does not affect the finishing characteristics of concrete. **MasterFiber F 018** is non-corrosive, alkali proof and will not stain the concrete surfaces. **MasterFiber F 018** is compatible with power trowelled, hand trowelled, coloured and broom finished concrete.

Packaging

Bags	0.9kg Mulchable
Carton	12 Bags
Pallet	27 Cartons

Storage & Shelf Life

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

MasterFiber F 018

Fibrillated micro polypropylene fibre for concrete

Disclaimer

MasterFiber F 018-ANZ-V5-0523

STATEMENT OF RESPONSIBILITY

The technical information and application advice given in this MB Solutions Australia Pty Ltd publication are based on the present state of our best scientific and practical knowledge. As the information herein is of a general nature, no assumption can be made as to a product's suitability for a particular use or application and no warranty as to its accuracy, reliability or completeness either expressed or implied is given other than those required by law. The user is responsible for checking the suitability of products for their intended use and for ensuring that the application and use of the product is in accordance with the manufacturer's guidelines and recommendations.

NOTE

Field service where provided does not constitute supervisory responsibility. Suggestions made by MB Solutions Australia Pty Ltd either orally or in writing may be followed, modified or rejected by the owner, engineer or contractor since they, and not MB Solutions Australia Pty Ltd, are responsible for carrying out procedures appropriate to a specific application.

MB Solutions Australia Pty Ltd

ABN 69 634 934 419
Unit 102, 2 Burbank Place
Norwest NSW 2153

Freecall: 1300 227 300

www.master-builders-solutions.com/en-au

MB Solutions New Zealand Ltd

45C William Pickering Drive
Albany, Auckland
New Zealand

Phone: +64 9 414 7233

Emergency Advice:

1300 954 583 within Australia (24hr)
0800 001 607 within New Zealand