

# MasterFiber M 080

Monofilament microfibre for reduced spalling of concrete in hydrocarbon fire situations

## Material Description

**MasterFiber M 080** is a monofilament microfibre made from 100% virgin homopolymer polypropylene specifically engineered to control fire-induced explosive spalling in concrete and reduce plastic shrinkage cracking.

**MasterFiber M 080** conforms to the requirements of EN 14889.2 Class Ia.

## Areas of Application

**MasterFiber M 080** applications include, but are not limited to:

- Slabs on ground: Residential and commercial
- Precast: Tunnel segments and panels
- Shotcrete: Civil tunnels, cross passages, and mines

## Characteristics & Benefits

- 725 million 6 mm microfibres per 1.0 kg of product.
- Uniformly distributes throughout the concrete with excellent finishability.
- Excellent reduction in plastic shrinkage cracking.
- Reduces fire-induced explosive spalling of concrete when used at appropriate dosages.

## Properties

Polymer type	Virgin polypropylene
Fibre type	Monofilament (Class Ia)
Length	6 mm
Equivalent diameter	18 $\mu$ m
Ultimate tensile strength	450 MPa
Density	910 kg/m <sup>3</sup>
Melting Point	160°C
Ignition Point	590°C
Absorption	Nil
Acid/alkali resistance	High

## Dosing & Batching

The typical dose rate of **MasterFiber M 080** is 1.0 – 2.0 kg/m<sup>3</sup>. **MasterFiber M 080** is packed in degradable paper 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 M 080** to the mix, it is recommended to mix for a minimum of 120 – 180 seconds. High fibre dosages may require a longer mixing time in order to achieve sufficient dispersion.

It is recommended that where automated fibre dosing systems are utilised, that they be checked for suitability and calibrated accordingly.

## Packaging

**MasterFiber M 080** is available in 1.0 kg paper bags or 450 kg bulk bags.

## Storage

**MasterFiber M 080** 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 an accepted test method.

## Disclaimer

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