

# MasterFiber® 150

## Structural polypropylene fibre for reinforcing cast and sprayed concrete

### DESCRIPTION

**MasterFiber 150** is extruded from a natural polypropylene homo polymer and formed into a flat fibre profile with profiled surface in order to anchor it in a cementitious matrix. Due to the large number of fibres per kg, the fibre shape and its anchoring capacity into the concrete, **MasterFiber 150** adds toughness and ductility to the concrete.

### FEATURES AND BENEFITS

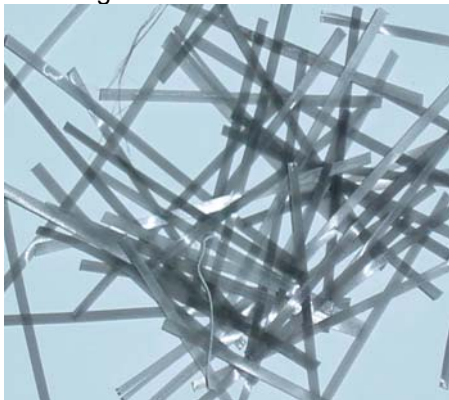
**MasterFiber 150** is user friendly and easy to dose into concrete mixes. It also has high resistance to acid/alkali attack and is therefore suitable for use in wet underground conditions. **MasterFiber 150** is recommended for the reinforcement of concrete and wet sprayed concrete applications.

### APPLICATIONS

- Sprayed concrete
- Slab-on-ground flooring
- Commercial floors
- Industrial floors
- Residential floors
- Various Precast applications

### PACKAGING

The fibres are packed loose in 6kg transparent plastic bags or in cardboard boxes to sit dosing into the mixer. Alternative pack sizes are available upon request and should be specified when ordering.



### PERFORMANCE DATA AND PHYSICAL PROPERTIES

Properties	
Material	Polypropylene 100% (translucent, black)
Design	Monofilament
Equivalent diameter	0.62mm
Length	50mm (also available in 40 & 65mm)
Tensile strength at yield	450 MPa
Modulus of elasticity	3100 MPa
Density	0.91 g/cm <sup>3</sup>
Acid / alkali resistance	High
Water absorption	Nil
Number of fibres per kg	Approximately 73,000
Melting point	160° C
Ignition point	590° C
EFNARC Plate test @ 6kg/m <sup>3</sup>	700 – 800 Joules
Round Determinate Panel test @ 6 kg/m <sup>3</sup> (ASTM 1550)	280 – 320 Joules

The Technical Data reflected here is the result of statistical information and does not represent guaranteed minimums. If control data is required, this can be obtained by requesting the Sales Specifications from our Technical Department.

### DOSAGE AND BATCHING

The fibres must be added to the concrete mixer after the water and admixtures and mixed for at least 2-3 minutes to ensure even distribution in the concrete. There may be a slight slump loss after addition of the fibres. Do not add extra water. Adjust the dosage of admixture in the mix to allow the addition of the fibres.

Typically 6 kg/m<sup>3</sup> will produce energy absorption of 700-800 Joules (EFNARC Panel Test) or 280-320 Joules (ASTM 1550) for an in-situ 35 MPa sprayed concrete. However, site trials must be carried out to confirm the performance of the fibre and the sprayed concrete mix.

### STORAGE

The material is very stable with no foreseen hazards. Protect against fire.

## MasterFiber® 150

### SAFETY PRECAUTIONS

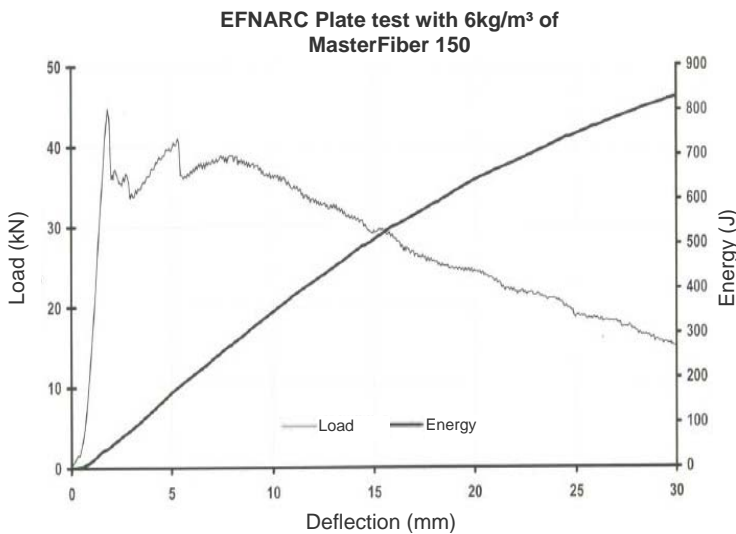
**MasterFiber 150** is extremely stable, presenting little hazard to health. However, in fire conditions, carbon monoxide, carbon dioxide and other gases or fumes may be evolved.

### NOTE

Field service, where provided, does not constitute supervisory responsibility. For additional info contact your local BASF representative. BASF reserves the right to have the true cause of any difficulty determined by accepted test methods.

### PERFORMANCE

The graph below shows typical results for the EFNARC test on a Plate with 6 kg/m<sup>3</sup> of **MasterFiber 150** in a C30/37 sprayed concrete mix.



### HANDLING AND TRANSPORT

The usual precautions and measures should be taken for handling any chemical substance. For example, use protective gloves and glasses. Wash hands before a break and on finishing work. Do not eat, drink or smoke during application.

The disposal of the product and its packaging is the responsibility of the end user and should be carried out according to current legislation.

### IMPORTANT NOTES

- Prior tests are recommended before using the product.
- Do not use higher or lower dosages than those recommended without first consulting our Technical Department.

For more information, please consult the Safety Data Sheet of this Product.

\* Properties listed are based on laboratory controlled tests.

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### BASF\_CC-UAE/Fiber\_150\_03\_10/v4/12\_15

#### STATEMENT OF RESPONSIBILITY

The technical information and application advice given in this BASF 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.

#### NOTE

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