

# MasterFiber<sup>®</sup> 240

## Structural macrosynthetic polypropylene fibre for reinforcing cast concrete

### DESCRIPTION

**MasterFiber 240** is extruded from a natural polypropylene homo-polymer in compliance with ASTM C1116 / C1116M “Standard Specification for Fiber-Reinforced Concrete” and EN 14889-2 “Fibres for concrete – Part 2: Polymer Fibres-Definitions, specifications and conformity.”

**MasterFiber 240** is specifically engineered and formed into a crimped profile in order to provide superior anchorage to the cementitious matrix. Further reinforcing concrete, it adds toughness and ductility.

### APPLICATIONS

**MasterFiber 240** can be used in:

- Concrete pavement
- Industrial and warehouse flooring
- Precast elements
- Composite metal decks

### PACKAGING

The fibres are pre-weighed and packed loose in 6kg cardboard boxes. Alternative pack sizes are available upon request and should be specified when ordering.



### PERFORMANCE CHARACTERISTICS PHYSICAL PROPERTIES\*

Properties	Value
Material	Polypropylene 100% (black)
Design	Monofilament
Specific gravity	0.91 g/cm <sup>3</sup>
Length	40 mm
Equivalent diameter	0.75 mm
Aspect ratio (L/D)	53.3
Alkali resistance	Excellent
Absorption	Nil
Tensile strength	338 MPa
Modulus of elasticity	4.8 GPa
Chemical resistance	Excellent
Melting point	160°C
Ignition point	590°C

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.

### METHODS OF USE

The fibres are designed to be introduced to the concrete mixer after the water and admixtures and mixed sufficiently to insure even distribution in the concrete.

**MasterFiber 240** can be used in combination with all the admixtures of BASF, particularly with **MasterLife** in flooring application to protect concrete against drying shrinkage cracks.

### DOSAGE

The dosage range for this synthetic fibre varies from 1.5 to 4.5 kg/m<sup>3</sup> in function of the specific characteristics requested for the fibre reinforced concrete. The use of **MasterFiber 240**, when used at an appropriate dosage, can substitute primary steel mesh based on project calculations and application. It can substitute the secondary steel mesh reinforcement.

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## STORAGE AND SHELF LIFE

**MasterFiber 240** should be stored at temperatures below 60°C. Avoid storing near strong oxidizers and avoid sources of ignition.

**MasterFiber 240** has a shelf life of 24 months if stored as directed.

## SAFETY PRECAUTIONS

**MasterFiber 240** is extremely stable, presenting little hazard to health. However, in fire conditions, carbon monoxide, carbon dioxide and other gases or fumes may be evolved.

## HANDLING AND TRANSPORT

The usual precautions and measures should be taken for handling any chemical substance. Use caution when stacking to avoid unstable conditions. 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 per current legislation.

## IMPORTANT NOTES

- It is recommended to test all fibres prior to use.
- Do not use a fibre dosage outside of the recommended dosage range unless specifically advised by our Technical Department

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

## NOTE

Field service, where provided, does not constitute supervisory responsibility. For additional information contact your local BASF representative.

BASF reserves the right to have the true cause of any difficulty determined by accepted test methods.

## QUALITY AND CARE

All products originating from BASF's Dubai, UAE facility are manufactured under a management system independently certified to conform to the requirements of the quality, environmental and occupational health & safety standards ISO 9001, ISO 14001 and ISO 45001.

\* Properties listed are based on laboratory controlled tests.

® = Registered trademark of the BASF-Group in many countries.

BASF\_CC-UAE/Fiber\_240\_03\_10/v4/11\_17

## 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

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