

MasterFiber® 249

Structural macrosynthetic polypropylene fibre for reinforcing cast-in-situ concrete

DESCRIPTION

MasterFiber 249 fibre 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 249 is specifically engineered for use as shrinkage and temperature (secondary) reinforcement, particularly suitable for replacing welded-wire reinforcement and conventional steel bars in alkaline environments, where a high chemical resistance is required, in corrosive or aggressive environment. Further reinforcing concrete by providing uniform distribution throughout the concrete matrix, excellent post crack performance and tight crack control.

TYPICAL APPLICATIONS

MasterFiber 249 can be used in:

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

METHOD OF USE

The fibres are designed to be introduced at any time before or during mixing of concrete produced in accordance with procedures specified in ASTM C94 / C94M.

MasterFiber 249 can be used in combination with all the admixtures of Master Builders Solutions, particularly with MasterLife SRA 872SA in flooring applications to protect concrete against drying shrinkage cracks.

PACKAGING

MasterFiber 249 is packaged and comes preweighed in 4 kg plastic bags.



PERFORMANCE CHARACTERISTICS PHYSICAL PROPERTIES*

Properties	Value
Material	Polyolefin 100% (colourless)
Design	Monofilament
Specific gravity	0.91 g/cm ³
Equivalent diameter	0.85 mm
Length	48 mm
Aspect ratio (L/D)	56.5
Alkali resistance	Excellent
Tensile strength	400 MPa
Modulus of elasticity	4.7 GPa
Absorption	Nil
Chemical resistance	Excellent
Melting point	160°C
Ignition point	350°C
T	

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.

APPLICATION GUIDELINES

DOSAGE

The recommended dosage range for **MasterFiber 249** is 2.5 to 8 kg/m³.

MasterFiber 249, when used at an appropriate dosage, is an option for the replacement of welded-wire reinforcement or conventional steel bars, as a safe and easy-to-use alternative reinforcing system that is rust proof and alkali resistant.



MasterFiber® 249

STORAGE AND SHELF LIFE

MasterFiber 249 should be stored at temperatures below 60°C. Avoid storing near strong oxidizers and avoid sources of ignition.

MasterFiber 249 has a shelf life of 24 months if stored as directed.

HEALTH AND SAFETY

MasterFiber 249 is extremely stable, presenting little to no hazard to health, however, in fire conditions; carbon monoxide, carbon dioxide, other gases and fumes may be evolved.

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 according to 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.

QUALITY AND CARE

All products originating from Master Builders Solutions 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 and ISO 14001.

- * Properties listed are based on laboratory controlled tests.
- ® = Registered trademark of the MBCC Group in many countries.

MBS_CC-UAE/Fiber_249_03_17/v2/11_17

STATEMENT OF RESPONSIBILITY

The technical information and application advice given in this Master Builders Solutions 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 Master Builders Solutions either orally or in writing may be followed, modified or rejected by the owner, engineer or contractor since they, and not Master Builders Solutions, are responsible for carrying out procedures appropriate to a specific application.

Master Builders Solutions Construction Chemicals LLC P.O. Box 37127, Dubai, UAE Tel: +971 4 8090800 www.master-builders-solutions.com/en-ae **Disclaimer:** the TUV mark relates to certified management system and not to the product mentioned on this datasheet





