

MasterFiber[®] MAC 2200CB

Structural macrosynthetic polypropylene fibre with chemical bond for low deflection applications

DESCRIPTION

MasterFiber MAC 2200CB is a chemically enhanced macrosynthetic fibre that exhibits superior bonding to cementitious matrices, thus increasing the post-crack load-carrying capacity and toughness of fibre-reinforced concrete.

The superior performance of **MasterFiber MAC 2200CB** results from a polymer resin innovation technology that provides engineered chemical bonding, a technology breakthrough from Master Builders Solutions. Through this advanced technology and highly engineered fibre architecture, the bonding capabilities of **MasterFiber MAC 2200CB** product far exceed that of the other commercially available polyolefin-based macrosynthetic fibres.

MasterFiber MAC 2200CB is engineered specifically to replace welded-wire reinforcement and reinforcing bars that are typically used for concrete reinforcement.

TYPICAL APPLICATIONS

Recommended for use in:

- Concrete pavement
- Cast-in-place and wet precast concrete
- Concrete bridge decks
- Slab-on-ground
- Composite metal decks

PACKAGING

MasterFiber MAC 2200CB is available in 2.27kg and 5kg bags.

PERFORMANCE CHARACTERISTICS PHYSICAL PROPERTIES*

Properties	Value
Material	Polyolefin 100% (translucent)
Design	Monofilament
Specific gravity	0.91 g/cm ³
Length	54 mm
Equivalent diameter	0.80 mm
Aspect ratio (L/D)	67.5
Alkali resistance	Excellent
Absorption	Nil
Tensile strength	585 MPa
Modulus of elasticity	6.6 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.	

APPLICATION GUIDELINES

METHOD OF USE

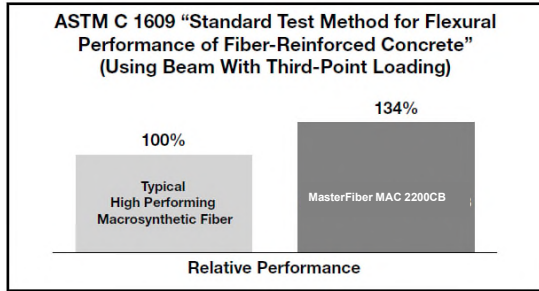
MasterFiber MAC 2200CB is most efficiently dispersed when introduced with the coarse aggregate prior to the addition of cement, or if this is not possible, after the batching cycle has been completed. Mixing time will vary based on when the fibres are introduced into the mixer. The normal range of mixing time is 3 to 5 minutes, but no less than 70 mixing revolutions.

DOSAGE & MIXING

The recommended dosage range for **MasterFiber MAC 2200CB** is 1.5 to 7.2 kg/m³ depending on application. The recommended dosage range for slab-on-ground application is typically 1.5 to 3 kg/m³. Because of variations in concrete materials, job site conditions and/or applications, dosages outside of the recommended range may be required. In such cases, consult our Technical Department.

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PERFORMANCE DATA



STORAGE AND SHELF LIFE

MasterFiber MAC 2200CB should be stored at temperatures below 60°C. Avoid storing near strong oxidizers and avoid sources of ignition.

Shelf life is 24 months when stored as above.

HEALTH AND SAFETY

MasterFiber MAC 2200CB 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. Use caution when stacking to avoid unstable conditions.

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.

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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.