

### Description

MasterFiber MAC200F synthetic macro reinforcing fiber is manufactured from a proprietary blend of polypropylene resins, in compliance with ASTM C1116/C 1116M, "Standard Specification for Fiber-Reinforced Concrete." MasterFiber MAC200F is specifically engineered for use as secondary reinforcement and provides excellent plastic shrinkage control and reduced settlement cracking. MasterFiber MAC200F provides increased flexural toughness and increased impact, shatter and abrasion resistance, improving the concrete's long-term durability and integrity. MasterFiber MAC200F is a true replacement for welded wire reinforcement, conventional light gauge steel reinforcement and steel fiber. It is specifically designed for use in shotcrete applications and slab-on-grade.

### Applications

Recommended for use in:

- Mining
- Slope stabilization
- Retaining walls
- Irrigation channels
- Burial vaults
- Septic tanks
- Thin wall precast
- Shotcrete
- Wall systems
- Industrial and warehouse floors
- Commercial slab construction
- Concrete pavement
- White topping and overlays

# MasterFiber™ MAC200F

## Synthetic Macro Reinforcing Fiber

### Features

- Excellent post-first crack performance
- Excellent finishability
- Optimal passage through grates and pumps due to its helical shape and structural integrity

### Benefits

- Eliminates the need for welded wire reinforcement (WWR) and conventional steel bars as secondary reinforcement, depending on the application
- Effective tight crack control
- Provides excellent plastic shrinkage crack reduction and settlement control
- Reduces production time and overall labor and material costs
- Improves green strengths – permits earlier stripping of forms with less rejection
- Reduces handling and transportation stresses

### Performance Characteristics

#### Physical Properties

Configuration	Highly modified collated fibrillated
Specific Gravity	0.91
Ignition Point	1094 °F (590 °C)
Melting Point	320 °F (160 °C)
Water Absorption	Nil
Chemical Resistance	Excellent
Alkali Resistance	Excellent
Tensile Strength	90,000-100,000 psi (620-690 MPa)
Length	1.5 in. (38 mm)

# Product Data: MasterFiber™ MAC200F

## Guidelines for Use

**Dosage:** The recommended dosage for MasterFiber MAC200F is 3 lb/yd<sup>3</sup> (1.8 kg/m<sup>3</sup>). They can be used at dosage rates from 3 lb/yd<sup>3</sup> (1.8 kg/m<sup>3</sup>) up to 13 lb/yd<sup>3</sup> (7.8 kg/m<sup>3</sup>) or the equivalent dosage of 0.2% by volume, unless otherwise specified.

**Mixing:** MasterFiber MAC200F fibers are packaged in pre-weighed, ready-for-use, degradable bags which are designed to be introduced at any time before, during, or after batching of other concrete ingredients in accordance with procedures specified in ASTM C 94/C 94M.

## Packaging

MasterFiber MAC200F fibers are packaged in pre-weighed degradable 3 lb (1.36 kg), 5 lb (2.27 kg) and 10 lb (4.54 kg) bags that can be added directly to the mixing system.

## Storage and Handling

**Storage Temperature:** MasterFiber MAC200F should be stored at temperatures below 140 °F (60 °C). Avoid storing near strong oxidizers and avoid sources of ignition. Use caution when stacking to avoid unstable conditions. Store in a sprinkled warehouse.

## Engineering Specifications

MasterFiber MAC200F, at 3 lb/yd<sup>3</sup> (1.8 kg/m<sup>3</sup>), 5 lb/yd<sup>3</sup> (3.0 kg/m<sup>3</sup>) or 10 lb/yd<sup>3</sup> (6.0 kg/m<sup>3</sup>), is an option for the replacement of WWR, as a safe and easy-to-use reinforcing system that is rust proof, alkali resistant, and compliant with industry codes when mixed in accordance to ASTM C 94/C 94M.

MasterFiber MAC200F should be specified for use in shotcrete applications for:

- Increased flexural toughness
- Reduced rebound
- Increased cohesion
- Increased impact and shatter resistance
- Extended pump life
- Replacement of WWR and secondary reinforcement
- Improved residual strength
- Improved durability
- Use in areas requiring no metal

MasterFiber MAC200F should be specified for use in concrete slabs:

- Enhanced residual strength, toughness and durability
- Reduced plastic shrinkage cracking
- Increased abrasion resistance
- Improved impact resistance
- Reduced permeability

BASF does not recommend MasterFiber MAC200F for use as a replacement for any structural steel or reinforcement.

## Related Documents

Material Safety Data Sheets: MasterFiber MAC200F

## Additional Information

For additional information on MasterFiber MAC200F, contact your local sales representative.

*The Admixture Systems business of BASF Construction Chemicals is a leading provider of innovative admixtures for specialty concrete used in the ready-mixed, precast, manufactured concrete products, underground construction and paving markets throughout the North American region. The Company's respected Master Builders brand products are used to improve the placing, pumping, finishing, appearance and performance characteristics of concrete.*



## BASF Construction Chemicals Admixture Systems

[www.masterbuilders.com](http://www.masterbuilders.com)

United States 23700 Chagrin Boulevard, Cleveland, Ohio 44122-5544 ● Tel: 800 628-9990 ● Fax: 216 839-8821  
Canada 1800 Clark Boulevard, Brampton, Ontario L6T 4M7 ● Tel: 800 387-5862 ● Fax: 905 792-0651

™BASF Construction Chemicals

© BASF Construction Chemicals, 2009 ● Printed in USA ● 02/09 ● LIT # 2000079

**Master  
Builders**