

# Monofilament PP Microfiber (MPF-03)

## Product Description

Fiberego's Monofilament PP Microfiber MPF-03, with a length of 3mm, is engineered specifically for the concrete industry. This polypropylene monofilament fiber is designed to enhance concrete integrity, offering superior performance in critical applications. The microfiber effectively integrates into concrete mixes, promoting a higher level of durability and structural cohesion.

## Technical Specifications

Composition	100% Virgin Polypropylene
Diameter	30-32 $\mu$ m
Length	3mm
Alkali&Acid Resistance	High
Tensile Strength	$\geq 500$ MPa
Elastic Modulus	$\geq 3.5$ GPa
Elongation	20 - 25%
Melting Point	160-170°C

## Product Advantages

- **Enhanced Durability:** Provides increased early age strength, enhancing concrete's integrity from the initial stages of setting.
- **Crack Reduction:** Significantly inhibits and controls the formation of intrinsic cracking, along with reducing both plastic shrinkage and settlement cracking.
- **Improved Resistance:** Offers greater resistance against abrasion and the effects of shattering forces, essential for maintaining concrete's structural integrity under stress.
- **Climate Resilience:** Helps reduce cracking related to freeze/thaw cycles, ensuring stability across varying temperatures.
- **Optimized Construction Processes:** Permits the application of thicker layers per pass in sprayed concrete, reducing rebound and material waste.
- **Fire Resistance:** Reduces fire explosive spalling, enhancing the safety of concrete structures in high-temperature scenarios.
- **Increased Cohesion:** Promotes uniform bleed and decreases segregation, leading to more consistent and stable concrete.

## Applications

- |                          |                                |
|--------------------------|--------------------------------|
| 1. Slabs on ground       | 12. Bridge decks               |
| 2. Residential sidewalks | 13. Self-compacting concrete   |
| 3. Driveways             | 14. High rise buildings        |
| 4. Decks                 | 15. Concrete framed structures |
| 5. Curbs                 |                                |
| 6. Stamped finishes      |                                |
| 7. Precast elements      |                                |
| 8. Overlays/Toppings     |                                |
| 9. Shotcrete             |                                |
| 10. Roads                |                                |
| 11. Pavements            |                                |

## FAQs

### Q1: How does MPF-03 improve concrete performance?

A1: MPF-03 minimizes cracking by controlling plastic shrinkage, enhancing cohesion, and reinforcing concrete against impact and abrasion.

### Q2: Can MPF-03 replace steel reinforcement?

A2: Yes, MPF-03 is a viable alternative for light gauge wire mesh in non-structural applications, providing enhanced durability and cost savings.

### Q3: What dosage of MPF-03 is recommended?

A3: A typical dosage ranges from 0.6 to 1.8 kg/m<sup>3</sup>, depending on project specifications and performance requirements.

## Packaging

- **Inner Packaging:** Each pack contains 0.2-4 kg, sealed in standard plastic bags for quality preservation.
- **Outer Packaging:** Packs are placed in woven bags or cardboard boxes, each weighing 10-20 kg, tailored to customer specifications.
- **Customized Options:** Available in water-soluble film, water-soluble paper, or regular paper bags for diverse needs.
- **Compression Packaging:** Reduces volume for efficient storage and transport, enhancing cost-effectiveness and sustainability.

## Storage and Transportation

### ► Storage Requirements:

Store in a dry, cool, ventilated area.  
Avoid direct sunlight to prevent degradation from UV exposure.  
Keep away from humid environments to maintain fiber performance.  
Avoid heavy pressure and high stacking to prevent packaging damage.

### ► Transportation Precautions:

Handle carefully during loading and unloading to prevent damage.  
Ensure the transport vehicle is dry and clean to avoid moisture.  
Protect from sharp objects and prevent heavy items from crushing the packaging.

We strive to ensure that any advice, recommendation, or information provided in our product literature is accurate and correct. However, due to the fact that we do not have direct or continuous control over where or how the products are applied, FibeRego cannot accept any liability, either directly or indirectly, arising from the use of our products, whether or not in accordance with any advice, specification, recommendation, or information provided by us.

FibeRego is a global manufacturer of fibers, specializing in a variety of fibers for the concrete industry.



FOR ASSISTANCE WITH FIBERS:

- ☎ +86 158 5427 9587
- ✉ info@fiberego-mikem.com (China office)
- ✉ sales@fiberego-mikem.com (US R&D office)
- 📍 No. 988, Shunxing Road, Tianqiao District, Jinan, Shandong, China