



# Synthetic PP Macrofiber (TE SPM-48)

## Product Description

Fiberego's TE SPM-48, a 48mm transparent embossed polypropylene macrofiber, offers a revolutionary reinforcement alternative for concrete applications. This synthetic fiber mimics the performance of steel with added benefits of corrosion resistance and ease of use, making it an ideal solution for enhancing the structural integrity and durability of concrete structures.

## Technical Specifications

Composition	100% Virgin Polypropylene
Diameter	0.2, 0.6, 0.8, 1.0mm
Length	48mm
Tensile Strength	≥400MPa
Elastic Modulus	≥4.0GPa
Elongation	20 - 25%
Alkali&Acid Resistance	High

## Product Advantages

- **Enhanced Concrete Performance:** Features a uniquely graded design that reduces voids in the concrete matrix for stronger and more uniform structures.
- **Cost-Effective Reinforcement:** Provides a three-dimensional reinforcement solution that is more economical and effective than traditional rebar or wire mesh.
- **Safety Improvement:** Increases job site safety by eliminating the hazards associated with handling heavy steel reinforcements.
- **Environmental Benefits:** Offers a sustainable alternative by reducing the embodied carbon footprint compared to conventional steel reinforcements.
- **Improved Durability:** Exhibits high chemical resistance and is corrosion-free, prolonging the life of concrete structures.
- **Reduction in Labor and Time:** Simplifies the construction process as it does not require cutting, placing, tying, or charring, significantly reducing construction time.
- **Superior Concrete Properties:** Increases ductility, flexural toughness, and provides enhanced post-crack reinforcement, improving the overall resilience of the concrete.

## Applications

- |                          |   |
|--------------------------|---|
| 1. Slab-on-ground        | 13.Sprayed concrete                         |
| 2. Extending joints      | 14.Rock and ground support                  |
| 3. Pavements             | 15.Permanent and temporary concrete linings |
| 4. Composite metal decks |   |
| 5. Mass concrete         |   |
| 6. Bridge decks          |   |
| 7. Sidewalks             |   |
| 8. Overlays              |   |
| 9. Precast structures    |   |
| 10.Industrial floors     |   |
| 11.Concrete linings      |   |
| 12.Slope stabilization   |   |

## FAQs

### Q1: How does TE SPM-48 compare to traditional steel fibers in terms of environmental impact?

A1: TE SPM-48 significantly reduces the environmental impact by lowering carbon emissions associated with the production and disposal of steel, offering a sustainable alternative.

### Q2: Can TE SPM-48 be used in high-traffic areas such as pavements and bridge decks?

A2: Yes, TE SPM-48 is designed for high-load applications, providing excellent resistance to wear and structural fatigue under heavy use.

### Q3: What makes TE SPM-48 a preferred choice for modern construction projects?

A3: Its cost-effectiveness, enhanced safety features, and ability to improve the mechanical properties of concrete make TE SPM-48 a superior choice for a variety of construction applications.

## Packaging

### Inner Packaging:

- **Loose Plastic Bags:** Fibers are packaged loosely in standard plastic bags to preserve quality and prevent damage. Each pack contains 0.2-4 kg, depending on the customer's requirements.
- **Water-Soluble Film Wrapping:** For added convenience and environmental consideration, fibers can also be wrapped in water-soluble film, molded into cylindrical shapes to facilitate usage and disposal.

### Outer Packaging:

- **Plastic Bag Packaging:** The plastic-bagged fibers are then placed either in cardboard boxes or woven bags, tailored to meet customer specifications and ensure safe transit.
- **Water-Soluble Film Packaging:** Fibers wrapped in water-soluble film are exclusively packed in cardboard boxes to maintain integrity and ease of handling.

## 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