

TECHNICAL DATA SHEET

Polypropylene fiber (PP fiber)

(Synthetic – Monofilament fiber)

PRODUCT DESCRIPTION:

Polypropylene Micro Fiber is a high-strength monofilament fiber made from virgin polypropylene using advanced technology. It naturally resists acids, alkalis, and heat while maintaining excellent chemical stability. When added to mortar or concrete, it effectively controls micro-cracks caused by temperature fluctuations during the plastic shrinkage phase, preventing crack formation and growth. This significantly enhances concrete's crack resistance, waterproofing, impact strength, and seismic durability. Widely used in underground waterproofing, roofing, walls, floors, pools, basements, roads, and bridges, it is an ideal material for improving the durability and wear resistance of concrete structures.

PROPERTIES

- Resist to shrink & crack
- Increase seepage resistance
- Increase friction resistance
- Increase freezing & thawing resistance
- Improve tendons protection
- Prevent mortar split and crackle expansion
- Increase impact resistance and peeling resistance

APPLICATION

- Asphalt pavement- Improve resistance to rutting and cracking.
- Concrete Road
- RCC (Roller Compacted Concrete) Pavement.
- Bridge Decks & Expansion joints.
- Dams & Canals.
- Railway platforms & Runways.

TECHNICAL SPECIFICATION

PARAMETER	RESULTS
Fiber Type	Monofilament
Melting point (C Deg.)	160-170
Acid and Alkali resistance	Strong
Water Absorbency	No
Crack Elongation	$\geq 15\%$
Elasticity Modulus	≥ 3000 M.pa
Fiber Diameter	25-45 μ m
Tensile Strength	560 min
Density	0.91-0.93 g/cm ³
Length	20 mm

ADVANTAGES

High chemical resistance
Low moisture absorption
Cost effective
High tensile strength and durability.
Improve concrete properties
Non- corrosive
Environment friendly.

METHOD OF APPLICATION

The proportion of cement, sand and aggregate is no need to be changed. Put cement, aggregate, additive and fiber together, then stir after adding enough water and time for stirring can be prolonged for 2~3 minutes in order to make the compound mix completely. Also, it can be mixed with cement and other aggregates in advance, stirring by adding water at worksite before construction.

DOSAGES

Pavement & Road -0.6 -0.9 kg/m³

Industrial floor & Parking – 0.6 to 1 kg/m³

Bridges & Decks – 0.9 – 1.2 kg/m³

Tunnel linings (fire resistance concrete) – 1-2.5 kg/m³

STORAGE

Keep Container close when not in use, keep container in dry, cool place away from direct sunlight and heat.

SHELF LIFE

If kept in the original undamaged packing Store the material upto 12-24 months from receipt of delivery.

PACKING

PP fiber available with 20 kg bag.

