



MICRO SYNTHETIC

Description

FORTA[®] MIGHTY-MONO[®] is an easy to finish micro synthetic fiber, made of 100% virgin homopolymer polypropylene monofilament. This fiber provides reduced plastic and settlement shrinkage, increased impact resistance and long-term durability. MIGHTY-MONO is non-corrosive, non-magnetic, chemically inert, and 100% acid and alkali proof.

Reinforcement Objective

To inhibit concrete cracking caused by plastic and settlement shrinkage that occurs prior to the initial set.

Physical Properties

Specific Gravity	0.91
Tensile Strength	83-96 ksi (570-660 MPa)
Length	0.75 in (19 mm), 0.5 in (13 mm), 0.25 in (6 mm)
Melting Point	319°F (160°C)
Material	Virgin Homopolymer Polypropylene
Form	Monofilament
Color	White
Acid / Alkali Resistance	Excellent
Absorption	Nil

Compliance & Certification

- ASTM C1116 / C1116M-10a, Standard Specification for Fiber-Reinforced Concrete, "Type III Synthetic Fiber-Reinforced Concrete"
- ASTM D7508 / D7508M-10(2015), Standard Specification for Polyolefin Chopped Strands for Use in Concrete
- Evaluated by ICC-ES, see Evaluation Report No. ESR-2720
- UL Listed: CBXQ.R18552 and CBXQ7.R18552
- DUNS: 094214129
- CAGE Code: 0AFN8
- NAICS: 325220
- CE 1020-CPR-010042512 EN 14889-2:2006



Applications

MIGHTY-MONO is primarily used in concrete applications such as slabs-on-ground, overlays/toppings, curbs, driveways, sidewalks, basement floors, garage floors, and colored concrete – anywhere that the objective is to control plastic shrinkage cracking while improving basic durability properties. Requires no mix design or placement changes!

Performance Benefits

- Increase surface durability
- Reduce plastic and settlement shrinkage
- Reduce settlement and bleeding
- Provide 3-dimensional reinforcement against micro-cracking

Recommended Dosage

This product is typically used at a minimum dosage rate of 1.0 lb/cu yd (0.6 kg/cu m) of concrete. Contact FORTA for design assistance and dosage recommendations.

Packaging

	Domestic	International
Bags	1.0 lb	0.6 kg
Cartons	40 bags	30 bags
Pallets	16 cartons/640 bags	12 cartons/360 bags

Recommendations

Addition: MIGHTY-MONO is packaged in mixer-ready bags that can be added directly into the concrete mixing system. The fiber should be added during or after batching of the other ingredients – never as the first mix ingredient.

Mixing: When possible, add fibers to a rotating drum. Once all fibers have been added to the batch, mix four to five minutes at standard mixing speed. Road-revolution speed should not be counted as part of the required fiber mixing time.

Slump: Fibers may reduce the visual slump measured by the slump-cone test, but has a lesser effect on flow-ability and workability. To regain any loss of workability or slump, the use of appropriate admixtures is recommended – avoid the addition of water.

Additional Information

Additional information such as the Safety Data Sheet, Certifications, videos and other literature can be found on the forta-ferro.com website. The website also features Project Profiles that show the many applications and benefits of FORTA products first-hand.

Limited Warranty

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The exclusive remedy for defective product is outlined in FORTA's Standard Terms and Conditions of Sale, available upon request. CONSEQUENTIAL DAMAGES ARE SPECIFICALLY EXCLUDED.

FORTA reserves the right to change the features and specifications of its products without prior notice.

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