



MICRO SYNTHETIC

Description

FORTA® ULTRA-LITE® is a specially-treated micro synthetic fiber, made of 100% virgin homopolymer polypropylene monofilament. This fiber provides unique suspension characteristics in a variety of cementitious mixes and applications. Due to the special fiber surface treatment, ULTRA-LITE offers valuable suspension capabilities to gasified or aerated cementitious products, acting as a stabilizing and cohesive agent in very flowable lightweight mixes.

Reinforcement Objective

To create a material suspension and mix stabilization, and to inhibit concrete cracking caused by plastic and settlement shrinkage that occurs prior to initial set.

Physical Properties

Specific Gravity*	1.0
Density*	1,686 lb/cu yd (1,000 kg/cu m)
Tensile Strength	83-96 ksi (570-660 MPa)
Length	0.5 in (13 mm)
Melting Point	509°F (265°C)
Material	Virgin Homopolymer Polypropylene
Form	Monofilament
Color	White
Acid / Alkali Resistance	Inert
Absorption	Nil

* Treated form.

Compliance & Certification

- ASTM C1116 / C1116M-10a, Standard Specification for Fiber-Reinforced Concrete
- ASTM D7508 / D7508M-10(2015), Standard Specification for Polyolefin Chopped Strands for Use in Concrete
- DUNS: 094214129
- CAGE Code: OFAN8
- NAICS: 325220

Applications

ULTRA-LITE can be used in any air-entrained or lightweight cementitious mix where a reduction in mix separation and segregation and reduced shrinkage characteristics are desirable. ULTRA-LITE fiber reinforced mixes may be placed horizontally or vertically, and above or below ground, and used in a wide variety of application areas, such as slabs, shotcrete, mines, tunnels, site-cast, and precast products.

Performance Benefits

- Increase mixture stabilization and cohesiveness
- Reduce plastic and settlement shrinkage
- Provide 3-dimensional reinforcement against micro-cracking

Recommended Dosage

This product is typically used at a dosage rate of 3.5 lb/cu yd (2.1 kg/cu m) of concrete. Contact FORTA Corporation for design assistance and dosage recommendations.

Packaging

	Domestic	International
Bags	3.5 lb	0.6 kg
Cartons	12 bags (42 lb)	30 bags (18 kg)
Pallets	16 cartons/192 bags (672 lb)	12 cartons/360 bags (216 kg)

Recommendations

Addition: ULTRA-LITE 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.

Warranty

FORTA® products are warranted to be free of defects in material and meet all quality control standards set by the manufacturer. FORTA Corporation specifically disclaims all other warranties, express or implied. The exclusive remedy for defective product shall be to replace the product or refund the purchase price. No agent or employee of this company is authorized to vary the terms of this warranty notice. FORTA Corporation has no control over the design, production, placement, or testing of the concrete products in which FORTA® products are incorporated, and therefore FORTA Corporation disclaims liability for the end product.

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

ULTRA-LITE® can be purchased from FORTA Corporation or an authorized FORTA® products distributor, dealer or representative.

FORTA®, ULTRA-LITE®, and "Circles of Strength" mark are registered trademarks of FORTA Corporation

© 2018 FORTA Corporation



FD.17.1.04.18