CONCRETE FIBERS

Master Format #: 03 24 00

PSI™ FIBERSTRAND™ 150

SYNTHETIC MICROFIBER

EUCLID CHEMICAL

PRODUCT INFORMATION

PACKAGING

0.67 lb (0.3 kg), 1.0 lb (0.45 kg), 1.3 lb (0.59 kg) and 5.0 lb (2.27 kg) water soluble bags. Additional and special packaging configurations, including bulk, are also available upon request.

SHELF LIFE

3 years in original, unopened package

SPECIFICATIONS/COMPLIANCES

ASTM C1116
ASTM D7508
ICC Acceptance Criteria AC32

TECHNICAL INFORMATION

Material: 100% virgin monofilament polypropylene

Specific Gravity: 0.91

Typical Dosage Rates:
0.67 - 1.0 lb/yd^3 (0.4 - 0.6 kg/m^3)

Available Lengths:
¼" (6 mm), ¾" (19 mm), and multi-length blend (ML)

Melt Point: 320°F (160°C)

Electrical/Thermal Conductivity: Low

Water Absorption: Negligible

Acid and Alkali Resistance: Excellent

Color: White

GWP Value: 2.84 kg CO_2eq/kg

* Tensile strength and aspect ratio are not applicable for micro fibers based on ASTM D7508.

DESCRIPTION

PSI FIBERSTRAND 150 is a synthetic monofilament polypropylene microfiber for concrete, mortar and grout that complies with ASTM C1116 (Standard Specification for Fiber Reinforced Concrete and Shotcrete) and is specifically designed to help mitigate the formation of plastic shrinkage cracking in concrete. Typically used at a dosage rate of 0.67 lb/yd^3 to 1.0 lb/yd^3 (0.4 to 0.6 kg/m^3), PSI FIBERSTRAND 150 microfibers have been shown to greatly reduce plastic shrinkage cracking when compared to plain concrete. PSI FIBERSTRAND 150 microfibers also comply with applicable portions of the International Code Council (ICC) Acceptance Criteria AC32 for synthetic fibers.

PRODUCT CHARACTERISTICS

FEATURES & BENEFITS

- Controls and mitigates plastic shrinkage cracking
- Reduces segregation, plastic settlement and bleed-water
- Provides three-dimensional reinforcement against micro-cracking and explosive spalling
- Increases surface durability and improves fire, impact and abrasion resistance
- Reduction of in-place cost versus wire mesh for non-structural temperature/shrinkage crack control
- Easily added to concrete mixture at any time prior to placement

PRIMARY APPLICATIONS

- Slabs-on-grade, sidewalks, driveways, parking lots, curb work, overlays and toppings
- Footings, foundations, walls and tanks
- Stucco applications
- Precast and prestressed structures
- Shotcrete and slope paving
- Spalling control and fire protection
- Composite steel deck

PRECAUTIONS/LIMITATIONS

- Use of fibers may cause an apparent loss in measured slump of concrete. This may be offset with the use of a water reducing admixture if necessary.
- Fibers should never be added to a "zero-slump" concrete. Ensure a minimum concrete slump of 3" (80 mm) prior to addition of any fiber material. Fibers may also be added in loose form to aggregate charging devices.
- In all cases, consult the Safety Data Sheet before use.

DIRECTIONS FOR USE

PSI FIBERSTRAND 150 microfibers can be added to the concrete mixture at any time prior to placement of the concrete. It is generally recommended to add any fiber material to the concrete mixer during batching. Fibers must be mixed with concrete for a minimum of three to five (3-5) minutes at maximum mixing speed, depending upon the mixer type, to ensure complete dispersion and uniformity.

CLEAN UP

Loose fiber material may be disposed in proper receptacles for refuse. Finishing equipment with fibers embedded in concrete should be thoroughly cleaned.