



# FABPRO™ Polymers' SPECTER™

Monofilament Fiber

SPECTER™ Monofilament Fibers are manufactured from 100% virgin homopolymer polypropylene resins. SPECTER™ Fibers meet the requirements of ASTM C1116/C1116M "Standard Specification for Fiber-Reinforced Concrete", ASTM D7508/D7508M "Standard Specification for Polyolefin Chopped Strands for use in Concrete", and the requirements of ICC ES AC32 Section 3.1.1 for plastic shrinkage reinforcement.

#### RECOMMENDED FOR USE IN:

- Slab-on-ground construction
- Concrete pavement
- Whitetopping and overlays
- Architectural precast
- Shotcrete
- Decorative concrete
- Stucco
- Reducing explosive spalling in the event of a fire
- Marine elements



## **FEATURES**

SPECTER™ Monofilament Fibers are specially designed to minimize early-age cracking in concrete. Millions of high tensile, high modulus filaments in every yard create an extremely dense, three-dimensional network in most cementitious applications. SPECTER™ Monofilament Fibers have the unique ability to reduce explosive spalling and damage in the event of a fire.

# **BENEFITS**

- · Inhibits and controls the formation of intrinsic cracking in concrete.
- Reduces plastic shrinkage cracking by an average of 75% at a dosage rate of one pound per cubic yard, along with helping to prevent settlement cracking.
- Measurably reduces concrete permeability, thus increasing the durability and service life of the concrete.
- · Provides three-dimensional reinforcement against micro-cracking.
- · Increases the impact and abrasion resistance of the concrete.



## PERFORMANCE CHARACTERISTICS

Specific Gravity	0.91
Melting Point	320°F (160°C)
Ignition Point	1,094°F (590°C)
Absorption	Nil
Alkali Resistance	Excellent
Tensile Strength	25,000 psi (170 MPa)
Length	0.75" (19 mm)
Denier	7.0
Modulus of Elasticity	300 ksi (2.07 GPa)
Fiber Count	30 million/lb (0.45 kg)

## **GUIDELINES FOR USE**

**DOSAGE:** The recommended dosage for the SPECTER™ Monofilament Fiber is 1.0 lb/yd³ (0.6 kg/m³).

MIXING: SPECTER™ Monofilament Fibers are packaged in preweighed, ready-to-use, degradable bags which are designed to be introduced at any time before or during mixing of concrete produced in accordance with procedures specified in ASTM C94/C94M. Standard practices detailed in ACI 302 for placing, finishing and curing concrete should be followed when using SPECTER™ Fibers.

### **ENGINEERING SPECIFICATIONS**

SPECTER™ Monofilament Fibers, when used at an appropriate dosage, provide excellent plastic shrinkage and crack reduction for concrete in the plastic state.

SPECTER™ Monofilament Fibers are rust proof, alkali resistant, and compliant with industry codes when used in concrete mixed in accordance with ASTM C94/C94M. SPECTER™ Monofilament Fiber should be specified for use in concrete slabs, precast and shotcrete:

- · To help control bleed water
- · To reduce plastic shrinkage cracking
- · To increase abrasion resistance
- · To improve impact resistance
- · To reduce explosive spalling in case of a fire

FABPRO POLYMERS does not recommend this fiber for use in slabs as a substitute for primary/structural reinforcement.

STORAGE AND HANDLING: SPECTER™ Monofilament Fibers should be stored at temperatures below 140°F (60°C). Avoid storing near strong oxidizers and avoid sources of ignition. Use caution when stacking to avoid unstable conditions. Store in a sprinkled warehouse.

PACKAGING: SPECTER™ Monofilament Fibers are packaged in pre-weighed degradable 0.5 lb (0.23 kg) to 1.5 lb (0.68 kg) bags that can be added directly to the mixing system.

SAFETY DATA SHEETS: SPECTER™ Monofilament Fiber

For additional product information, contact your local sales representative or Customer Service at (800) 821-4391.



