

# HP 1922

PP Monofilament Microfiber | High Performance Fiber

#### **DESCRIPTION**

F-MAX | HP is our new generation microfiber with ultra-thin / high strength filament technology that provides optimum performance in plastic cracking prevention.F-MAX | HP fibers provide a dense 3D net composed of more than 100 million filaments per cubic yard, achieving superior performance in reducing plastic cracking as compared to conventional fibers (20 to 30 million filaments/yd3). Following ACI 544. 2R testing recommendations, the high strength and highest number of filaments per pound (200 million/lb) of F-MAX | HP fibers at 0.5 lb/yd3 proved greater performance than conventional fiber (30 million/lb) even at twice the dosage (1 lb/yd3), improving your concrete and costs at the same time.

#### **HOW TO USE**

F-MAX is ready to use. The water-soluble bag can be thrown into the concrete mix at any time during the batching process except at the same time as the cement. Minimum mixing time should be at least 5 minutes at high RPM for adequate fiber dispersion. Concrete mixing and placement should adhere to ASTM C94/C94M and ACI 302 specs respectively.

#### **APPLICATIONS**

- ✓ Industrial, commercial and residential slabs.
- ✓ Hydraulic structures.
- ✓ Precast.
- ✓ Water tanks, pipes and pools.
- ✓ Fiber cement.
- ✓ Stucco and mortars.
- ✓ Waterproofing and sealants.

## **BENEFITS**

- ✓ Easy to use, ship and store.
- ✓ Excellent finishability.
- ✓ Greater reduction of plastic shrinkage cracking than standard fiber.
- ✓ Substitutes metal wire mesh when used to reduce plastic shrinkage cracking.
- ✓ Does not require skilled labor.
- ✓ Non-corrodible and improved alkali resistance.
- ✓ Reduces permeability adding durability and service life of concrete.
- ✓ Greatly decreases aggregate segregation.
- ✓ Reduces bleeding and promotes uniformity.
- ✓ Improves resistance to impact, abrasion and shattering.

#### **TECHNICAL DATA**

Material: 100% virgin polypropylene

Length: 34" Color: White

Design: Monofilament Section: Circular Fibers / lb: 200 million Specific gravity: 0.73 Melting Point: 320°-340°F

|160°-170°C

Flash Point: 1,094°F (590°C) Tension resistance: 450 MPa Modulus of elasticity: 6.2 GPa

Absorption: None

Alkali Resistance: Excellent Acid Resistance: Excellent Electrical conductivity: Low Thermal conductivity: Low

## SUGGESTED DOSAGE

In ready-mixed concrete, 0.5 lb per cubic yard is recommended. For made-on-site concrete, 0.1 lb per bag of cement (94 lb) is recommended.

## **CAUTIONS**

FMAX is not a substitute for primary or structural reinforcing steel.

# **PACKAGING**

Paper bag: 0.5 lb (227 gr).

Box: 24 bags.

Pallet: 54 boxes = 1,296 bags = 648

1b = 294 kg.

Test	Unit	Control	FMAX   HP	% CONTROL	ICC CRITERIA
Compressive Strength	PSI	3783	3869	102%	≥Control
Flexural Strength	PSI	570	602	105%	≥Control
Freeze/Thaw Durability	%	89.70	92.80	103%	≥Control
Bond Strength	PSI	112.10	139.90	125%	≥Control
Plastic Shrinkage Cracking Reduction	%	-	88%		Min. 40%

<sup>\*</sup>Additional presentations can be provided upon request.