SIKA FIBERMESH 150HP MICRO-SYNTHETIC FIBER
Sika Fibermesh 150HP, micro-reinforcement system for concrete—100 percent virgin homopolymer polypropylene ultra-type multifilament (monofilament) micro-fibers fibers containing no reprocessed olefin materials. Specifically engineered and manufactured in an ISO 9001 certified manufacturing facility for use as concrete reinforcement.

FEATURES & BENEFITS
• Inhibits and controls the formation of intrinsic cracking in concrete
• Increases cohesion and reduces segregation
• Reduces settlement and bleeding
• Reduces plastic shrinkage and settlement cracking
• Increases impact and shatter resistance
• Reinforces against abrasion
• Reduces freeze/thaw damage
• Provides durability
• Alternative system to traditional reinforcement when used for secondary (crack control reinforcing in concrete
• 68% Crack Reduction Ratio per the ASTM C1579 testing at the minimum dosage rate of 0.5 pcy (0.3 kg/m3)

PRIMARY APPLICATIONS
Applicable to all types of concrete which demonstrate a need for resistance to intrinsic cracking, improved water tightness and an aesthetic finish.
• Slabs-on-ground • Stucco • Roads and pavement
• Sidewalks • Shotcrete • Tanks and pools
• Driveways • Overlays & toppings • Self compacting concrete
• Stamp / Stained Finishes • Polished Finishes

COMPLIANCE
• Complies with European Standard EN 14889-2:2006 Fibers for Concrete Part 2: Class Ia
• Complies with ASTM C 1116/C 1116M,Type III fiber reinforced concrete
• ISO 9001 Quality Assured Facility

CHEMICAL AND PHYSICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Absorption</td>
<td>Nil</td>
</tr>
<tr>
<td>Ignition Point</td>
<td>759.2°F (404°C)</td>
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<tr>
<td>Acid &amp; Salt Resistance</td>
<td>High</td>
</tr>
<tr>
<td>Melt Point</td>
<td>320°F (160°C)</td>
</tr>
<tr>
<td>Alkali Resistance</td>
<td>Alkali Proof</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>0.91</td>
</tr>
<tr>
<td>Electrical Conductivity</td>
<td>Low</td>
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<tr>
<td>Thermal Conductivity</td>
<td>Low</td>
</tr>
<tr>
<td>Fiber Length</td>
<td>0.25 &amp; 0.5 in (6 &amp; 12 mm)</td>
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</tbody>
</table>
PRODUCT USE

MIXING: Fibermesh 150HP micro reinforcing is a mechanical, not chemical process. The addition of Fibermesh 150HP multifilament fiber does not require any additional water or other mix design changes at normal rates. Fibermesh 150 HP fiber is added to the mixer during or after batching the other concrete materials. After the addition of the fibers, the concrete should be mixed for a sufficient time (batch plant: minimum 5 minutes or 70 revolutions) to ensure uniform distribution of the fibers throughout the concrete mix. Mixing times may vary please contact Sika Fiber representative.

PLACING: Fibermesh 150HP micro-reinforced concrete can be pumped, sprayed or placed using conventional equipment.

FINISHING: Fibermesh 150HP micro-reinforced concrete can be finished by normal finishing techniques such as, exposed aggregate, broomed and tined surfaces.

APPLICATION RATE: The standard application rate for Fibermesh 150HP fibers is a minimum of 0.5 lbs/yd² (0.3 kg/m²). For specialty performance see your local Sika Fiber representative.

GUIDELINES

Fibermesh 150HP fibers should not be used to replace structural, load-bearing reinforcement, as a means of using thinner concrete sections than original design, to increase joint spacing past those dimensions suggested for un-reinforced concrete.

COMPATIBILITY

Fibermesh 150HP fibers are compatible with all concrete admixtures and performance enhancing chemicals.

SAFETY

No special handling is required with Fibermesh 150HP fibers. Full Safety Data Sheets are available on request.

PACKAGING

Fibermesh 150HP fibers are available in a variety of packaging options. The 0.5 lb bag is standard. Bags are packed into cartons, palletized and shrink-wrapped for protection during shipping. Special packaging is available for full truckload addition. Store materials in a cool dry place. Do not store in direct sunlight.

TECHNICAL SERVICES

Trained Sika Fiber specialists are available worldwide to assist and advise in specifications and field service. Sika Fiber representatives do not engage in the practice of engineering or supervision of projects and are available solely for service and support of our customers.

REFERENCE DOCUMENTS

- ACI 304 Guide for Measuring, Mixing,Transporting and Placing Concrete
- ACI 506 Guide for Shotcrete
- ACI 360 Guide to Design of Slab-on-Ground
- ASTM C1116/C1116M Standard Specification for Fiber-Reinforced Concrete and Shotcrete
- Concrete Society (UK) Technical Report 34 Concrete Industrial Floors
- Concrete Society (UK) Technical Report 22 Non-Structural cracks in concrete
- European Standard EN 14889-2: 2006 Fibers for Concrete

SPECIFICATION CLAUSE

Fibers for concrete shall be Sika Fibermesh® 150HP, 100 percent virgin polypropylene multifilament fibers containing no reprocessed olefin materials. The fibers shall conform to ASTM C1116 Type III and manufactured specifically for the secondary reinforcement of concrete.

or

Fibers for concrete shall be Sika Fibermesh® 150HP, 100 percent virgin polypropylene multifilament fibers containing no reprocessed olefin materials. The fibers shall conform to EN 14889-2: 2006 Class la and manufactured specifically for the secondary reinforcement of concrete.

The fibers shall be manufactured in an ISO 9001 certified manufacturing facility. Unless otherwise stated, Sika Fibermesh 150HP fibers shall be added to the concrete at the batching plant at the recommended application rate of ... lbs/yd² (... kgs/m²) and mixed for a sufficient time (minimum 5 minutes at full mixing speed) to ensure uniform distribution of the fibers throughout the concrete. Fibrous concrete reinforcement shall be manufactured by Sika Fibers, LLC, 4019 Industry Drive, Chattanooga, TN. 37416 USA, tel: 833.236.1255, web site: www.Fibermesh.com.