

# SikaFiber® PPF-500 *(formerly Fibercast 500)*

## Homopolymer Polypropylene Concrete Fibres

**Description** SikaFiber® PPF-500 is a micro-reinforcement system for concrete, consisting of 100% percent virgin homopolymer polypropylene fibres containing no reprocessed olefin materials. Specifically engineered and manufactured in an ISO-9001:2000-certified facility for use as secondary concrete reinforcement for precast applications.

**Where to Use** On all types of concrete which demonstrate a need for toughness, resistance to intrinsic cracking and improved water-tightness, such as:

- Septic tanks
- Statuaries
- Marine products
- Utility structures
- Manhole cones and risers
- Agricultural products
- Hazardous material storage
- Burial Vaults

**Advantages**

- Reduces plastic shrinkage cracking in concrete.
- Alternative to traditional reinforcement.
- Reinforces against water migration and reduces damage from freeze/thaw.
- Improves impact-, shatter- and abrasion-resistance of concrete.
- Improves green and residual strength of concrete.
- Imparts toughness to hardened concrete.
- Good finishability.

**Standards** SikaFiber® PPF-500 meets the requirements of ASTM C1116 C/116 M, Type III fibre-reinforced concrete.

**Typical Data**

<b>Packaging</b>	38 mm fibre : 900 g degradable bags, 11/box, 27/pallet
<b>Fibre Type</b>	Homopolymer polypropylene
<b>Shelf Life and Storage</b>	5 years if stored in original and unopened packaging under dry conditions. Protect product from the moisture and rain.
<b>Properties</b>	
<b>Absorption</b>	Nil
<b>Specific Gravity</b>	0.91
<b>Electrical Conductivity</b>	Low
<b>Thermal Conductivity</b>	Low
<b>E-Modulus</b>	3.5 GPa
<b>Alkali resistance</b>	Excellent alkali resistance
<b>Acid and Salt Resistance</b>	High
<b>Melt Point</b>	162 °C
<b>Ignition Point</b>	593 °C
<b>Aspect Ratio</b>	96.5

**How to Use**

**Dosage** Standard recommended dosage rate of SikaFiber® PPF-500 is 0.9 kg/m³ of concrete, or as required by specific mix-design.

**Mixing** SikaFiber® PPF-500 micro reinforcing is a mechanical, not chemical, process. The addition of SikaFiber® PPF-500 fibres does not require any additional water or other mix design changes at normal rates. The fibres are added to the mixer before, during or after batching the other concrete materials. Mixing time and speed are specified in ASTM C 94.

**Tooling and Finishing** SikaFiber® PPF-500-reinforced concrete can be finished by most finishing techniques.



# Construction

## Clean Up

Use personal protective equipment (chemical resistant goggles/gloves/clothing). Ventilate area. In absence of adequate ventilation, use properly-fitted NIOSH respirator. Without direct contact, remove spilled or excess product and place in suitable sealed container. Dispose of excess product and container in accordance with applicable environmental regulations.

## Health and Safety Information

For information and advice on the safe handling, storage and disposal of chemical products, users should refer to the **most recent Safety Data Sheet** containing physical, ecological, toxicological and other safety-related data.

KEEP OUT OF REACH OF CHILDREN  
FOR INDUSTRIAL USE ONLY

The information, and in particular, the recommendations relating to the application and end-use of Sika products, are given in good faith based on Sika's current knowledge and experience of the products when properly stored, handled and applied under normal conditions, within their shelf life. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any recommendations, or from any other advice offered. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users should always refer to the most recent issue of the Product Data Sheet for the product concerned, copies of which will be supplied on request or can be accessed in the Internet under [www.sika.ca](http://www.sika.ca).



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