

# PRODUCT DATA SHEET

## SikaFiber® PPM-12

### POLYPROPYLENE MICROFIBERS FOR MORTARS AND CONCRETE

#### PRODUCT DESCRIPTION

SikaFiber® PPM-12 is a polypropylene monofilament fibre which reduces the occurrence of plastic shrinkage cracking and plastic settlement whilst enhancing the surface properties and the durability of the hardened cementitious product. The fibres are coated with surfactant to improve dispersion. SikaFiber® PPM-12 is extremely fine and although slightly visible at the plastic stage, they are not readily seen on the hardened surface of the cementitious product.

#### USES

For most types of non-structural cementitious mortars and concrete with need to reduce the incidence of shrinkage cracking

- Concrete slabs on ground
- Screeds and overlays
- Renders and plasters
- Precast concrete elements
- Sprayed applications
- Extruded concrete
- Interior and exterior applications

#### PRODUCT INFORMATION

<b>Chemical Base</b>	100% polypropylene
<b>Packaging</b>	0.6 kg pulpable bag (carton box with 24 bags) 0.9 kg pulpable bag (carton box with 17 bags)
<b>Appearance / Colour</b>	Transparent fibers
<b>Shelf Life</b>	24 months from date of production if stored properly in undamaged unopened, original sealed packaging
<b>Storage Conditions</b>	Storage temperatures between +5°C and +30°C. Store in a dry, covered place, protected from moisture, UV radiation, direct sunlight and frost.
<b>Density</b>	~0.91 g/cm <sup>3</sup>
<b>Dimensions</b>	Diameter: 32 microns
<b>Product Declaration</b>	Class Ia mono-filament according to EN 14889-2

#### CHARACTERISTICS / ADVANTAGES

- Safe and easy to use
- Improves durability
- Reduces tendency for plastic and drying shrinkage cracking
- Reduces plastic settlement
- Reduces permeability of the concrete
- Reduces slab curling
- Increases impact resistance

#### APPROVALS / STANDARDS

Polymer fibres for other uses in concrete mortar or grout according to EN 14889-2 DoP number 0214080210100000361088

## TECHNICAL INFORMATION

### Specific Advice

**Material** 100% Virgin Polypropylene  
**Ignition Point** 365°C  
**Surface** Coated for dispersion  
**Design** Monofilament Fibre  
**Fibre Length** Blended  
**Thermal Conductivity** Low  
**Electrical Conductivity** Low  
**Acid Resistance** High

### Resistance to Alkalinity

100%

## APPLICATION INFORMATION

### Recommended Dosage

0.6 kg / 0.9 kg per m<sup>3</sup> concrete.

## APPLICATION INSTRUCTIONS

### DISPENSING

The fibres should ideally be added in the mixer at the batching plant: although in some instances this may not be possible and adding the fibres on site will be the only option. If mixing at a dry batch plant, fibres should be the first constituent in the truck along with one third of the mixing water. After all the other ingredients have been added, including the remaining mixing water, the concrete should be mixed for a minimum of 70 revolutions at full speed to ensure uniform fibre dispersion.

### LIMITATIONS

- For best results use a good quality concrete / mortar. Fibres will not improve the quality of a poor concrete or mortar
- SikaFiber® PPM-12 are compatible with other Sika admixtures
- Must not be used to replace structural steel reinforcement

### VALUE BASE

All technical data stated in this Product Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

### LOCAL RESTRICTIONS

Please note that as a result of specific local regulations the performance of this product may vary from country to country. Please consult the local Product Data Sheet for the exact description of the application fields.

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Product Data Sheet  
 SikaFiber® PPM-12  
 October 2018, Version 01.02  
 021408021010000036

## ECOLOGY, HEALTH AND SAFETY

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

### LEGAL NOTES

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 in accordance with Sika's recommendations. 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 written recommendations, or from any other advice offered. The user of the product must test the product's suitability for the intended application and purpose. Sika reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request.