

PRODUCT DATA SHEET

SikaFiber®- P/P 18mm

POLYPROPYLENE FIBERS FOR CONCRETE AND MORTARS



DESCRIPTION

SikaFiber®- P/P 18mm are specially processed polypropylene fibers.

USES

SikaFiber®- P/P 18mm are supplied into water-soluble bags, ready to be incorporated into concrete and mortar mixtures. The product is also supplied into larger packaging for use in cases of great consumption.

SikaFiber®- P/P 18mm are used in cases of:

- Slabs and large concrete areas
- Concrete and mortars that are to be subjected onto impact shocks
- Mortars and concrete that demand high cohesion during laying, as in cases of oblique areas or in cases of precast elements
- Thin layers of shotcrete
- Precast elements for improvement of strengths into edges, corners, e.t.c.
- Renderings, plaster, e.t.c.

CHARACTERISTICS / ADVANTAGES

SikaFiber®- P/P 18mm due to their special production process are very easily soluble into the fresh mortar paste, producing thus a very dense net which results in:

- Reduction of cracking during shrinkage
- Improvement of impact strength and impermeability of hardened cement paste in concrete and cement mortars
- Fibers do not replace the use of static reinforcement, but they can replace the use of reinforcement against cracking

APPROVALS / CERTIFICATES

Polypropylene fibers, Class Ia, Length 18mm, for use in concrete and mortar according to EN14889-2:2006, Declaration of Performance 40277508, and provided with the CE-mark.

PRODUCT INFORMATION

Chemical base	Polypropylene
Packaging	Water soluble 600 gr bags into carton box Bulk supply into 25kg carton box
Appearance / Colour	Fibers round shaped, white
Shelf life	60 months from date of production
Storage conditions	Store in original, sealed, unopened packaging, protected from direct sunlight, moisture and frost.
Density	Bibliographic: 0.91 gr/cm ³ Linear density: 6.7 (± 10%) dtex
	(DIN EN ISO 13392)

Dimensions	Diameter: 25 µm (± 10%) Length: 18mm (± 10%)	
Melting Point	165 °C	(ISO 11357-3)
Ignition Temperature	570 °C	(ISO 11357-3)

TECHNICAL INFORMATION

Concreting Guidance	The standard rules of good concreting practice, concerning production as well as placing, are to be followed. Refer to relevant standards. Fresh concrete must cure properly.	
Tensile Strength	550 (-50) Nt / mm ² 6.8 (±10%) cN / dtex	(EN 14899-2)
Modulus of Elasticity in Tension	~ 5.4 Gpa	
Resistance to Alkalinity	Exceptional	
Elongation at Break	30 % (+/- 10%)	(EN 14899-2)

APPLICATION INFORMATION

Recommended Dosage	At least 600 gr SikaFiber®- P/P 18mm / m ³ of concrete or mortar
Compatibility	SikaFiber®- P/P 18mm can be combined with a lot of products from Sika's product range: - Sika® Plastiment® / Sikament® / Sika® ViscoCrete® / Sika® ViscoFlow® superplasticizers - All special concrete admixtures - All mortar admixtures In all cases, trials are recommended before combining products.
Dispensing	SikaFiber®- P/P 18mm are added to the fresh concrete mix. Add the necessary amount of bags into the truck mixer, depending on the mix size. Mix thoroughly for 2 – 6 minutes.

LIMITATIONS

- When using SikaFiber®- P/P 18mm a suitable mix design must be taken into account and local material sources should be tested.
- Use 18 mm length fibers in case of > 10 mm aggregate size.
- Use 6 or 12 mm length fibers in case of < 10 mm aggregate size.
- In case of aggregates with size < 6 mm, incorporate the fibers into the mix manually.
- Before application suitability tests must be performed.

BASIS OF PRODUCT DATA

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.

ECOLOGY, HEALTH AND SAFETY

This product is an article as defined in article 3 of regulation (EC) No 1907/2006 (REACH). It contains no substances which are intended to be released from the article under normal or reasonably foreseeable conditions of use. A safety data sheet following article 31 of the same regulation is not needed to bring the product to the market, to transport or to use it. For safe use follow the instructions given in this product data sheet. Based on our current knowledge, this product does not contain SVHC (substances of very high concern) as listed in Annex XIV of the REACH regulation or on the candidate list published by the European Chemicals Agency in concentrations above 0.1% (w/w).

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.

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