PRODUCT DATA SHEET

SikaFiber®-150

(formerly MasterFiber® 150)

Structural polypropylene fiber for reinforcing sprayed concrete

DESCRIPTION

SikaFiber®-150 is extruded from a natural polypropylene homo polymer and formed into a flat profile with profiled surface in order to anchor it in a cementitious matrix.

Due to the large number of fibres per kg, the fibre shape and its anchoring capacity into the concrete, SikaFiber®-150 adds toughness and ductility to the concrete.

USES

SikaFiber®-150 is recommended for the reinforcement of concrete and wet sprayed concrete applications.

CHARACTERISTICS / ADVANTAGES

SikaFiber®-150 is user friendly and easy to dose into concrete mixes. It also has high resistance to acid/alkali attack and is therefore suitable for use in wet underground conditions.

PRODUCT INFORMATION

Product Declaration	Acid / alkali resistance - High Water absorption - Nil **EFNARC Plate test @ 6kg/m³** = 700 – 800 Joules **Round Determinate Panel test @ 6kg/m³ (ASTM 1550)** = 280 – 320 Joules
Fibre Volume Content	Number of fibres per kg - Approximately 73,000
Packaging	The fibres are packed loose in 6kg transparent plastic bags or in cardboard boxes to suit dosing into the mixer. Alternative pack sizes are available upon request and should be specified when ordering.
Fibre Type	Monofilament (Flat profile with profiled surface)
Shelf Life	The material is very stable with no foreseen hazards. Protect against fire.
Storage Conditions	The material is very stable with no foreseen hazards. Protect against fire.

Appearance / Colour	Polypropylene 100% (translucent, black)
Length	50mm (also available in 40 & 65mm)
Diameter	0.62mm
Density	0.91 g/cm³
Melting Point	160°C
Ignition Temperature	590°C
Tensile Strength	394 MPa (at yield)
Modulus of Elasticity in Tension	4.4 GPa

SYSTEM INFORMATION

Systems	Properties listed in this product data sheet are for guidance and are not a guarantee of performance. The technical Data reflected here is the result of statistical information and does not represent guaranteed minimums. If control data is required, this can be obtained by requesting the sales specification from our technical department.

APPLICATION INFORMATION

Recommended Dosage	The fibers must be added to the concrete mixer after the water and admixtures and mixed for at least 2-3 minutes to ensure even distribution in the concrete. There may be a slight slump loss after addition of the fibres. Do not add extra water. Adjust the dosage of admixture in the mix to allow the addition of the fibres. **Typically, 6 kg/m3** will produce **energy absorption** of **700-800 Joules (EFN-ARC Panel Test)** or **280-320 Joules (ASTM 1550)** for an in-situ 35 MPa sprayed concrete. However, site trials must be carried out to confirm the performance of the fibre and the sprayed concrete mix.

Product Data Sheet
SikaFiber®-150
April 2024, Version 01.02
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2 / 3

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.

LIMITATIONS

▪ Prior tests are recommended before using the product.
▪ Do not use higher or lower dosages than those recommended without first consulting our Technical Department.

For more information, please consult the safety data sheet (SDS) of this product.

ECOLOGY, HEALTH AND SAFETY

SikaFiber®-150 is extremely stable, presenting little hazard to health. However, in fire conditions, carbon monoxide, carbon dioxide and other gases or fumes may be evolved.
The usual precautions and measures should be taken for handling any chemical substance. For example, use protective gloves and glasses. Wash hands before a break and on finishing work. Do not eat, drink or smoke during application.
The disposal of the product and its packaging is the responsibility of the end user and should be carried out according to current legislation.

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.

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. It may be necessary to adapt the above disclaimer to specific local laws and regulations. Any changes to this disclaimer may only be implemented with permission of Sika® Corporate Legal in Baar.

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Product Data Sheet
SikaFiber®-150
April 2024, Version 01.02
021408000000002022

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