

PRODUCT DATA SHEET

Sika® Fibercast®-500

MICRO-SYNTHETIC FIBRE

PRODUCT DESCRIPTION

Sika® Fibercast®-500, micro-reinforcement system for concrete is 100 percent virgin homopolymer polypropylene fibres containing no reprocessed olefin materials. Specifically engineered and manufactured in an ISO 9001 certified manufacturing facility for use as reinforcement for concrete applications. Sika® Fibercast®-500 was previously Fibercast 500.

USES

Sika® Fibercast®-500 act mechanically by supporting the aggregate within the concrete with multidimensional fibre network and develops a uniform bleed system. The fibre does not affect the curing process chemically and does not absorb water. Typical applications include:

- Precast
- Hazardous material storage
- Septic tanks
- Stucco
- Agricultural products
- Tanks and storage
- Marine products
- Walls
- Shotcrete

PRODUCT INFORMATION

Packaging	Sika® Fibercast®-500 fibres are available in a variety of packaging options. The bags are packed into cartons and palletized.
Shelf Life	When stored in dry conditions shelf life is 5 years
Storage Conditions	Sika® Fibercast®-500 should be stored in a dry warehouse. Protect product from the rain.
Density	0.91
Dimensions	<ul style="list-style-type: none">▪ Length: 6mm, 12mm, 19mm or 50 mm.▪ Diameter: Graded 0.03 to 0.24 mm.▪ Aspect Ratio: Varies

CHARACTERISTICS / ADVANTAGES

- Increases cohesion and reduces segregation
- Inhibits and controls the formation of intrinsic cracking in concrete
- Reduces plastic shrinkage and settlement cracking
- Reinforces against the effect of shattering forces
- Reinforces against abrasion
- Reduces freeze/thaw damage
- Inhibits water migration
- Permits thicker layer per passing of sprayed concrete
- Reduces rebound and material waste in sprayed concrete

APPROVALS / STANDARDS

- Complies with European Standard EN 14889-2:2006 Fibres for Concrete Part 2: Class 1b and carries CE marking
- Complies with ASTM C 1116/C 1116M, Type III fiber reinforced concrete

Melting Point 162 °C (324 °F)

Resistance to Alkalinity Excellent

APPLICATION INFORMATION

Recommended Dosage

The dosage of the Sika® Fibercast®-500 will vary according to the type of application and performance requirements. Standard recommended dosage ratio of Sika® Fibercast®-500 is between 0.9 to 1.8 kg/m³ of concrete. Dosages outside the recommended dosage range can be used to meet project specific requirements. If this is the case please contact your Sika representative for technical support.

Dispensing

Sika® Fibercast®-500 in degradable bag can be added directly to the concrete mixing system after the batching of the other ingredients and mixed for 4 to 5 minutes or 70 revolutions.

Application

The addition of Sika® Fibercast®-500 at the normal recommended dosage rate does not require any mix design or application changes. The fibre concrete can be mixed, sprayed or placed using conventional equipment.

Tooling & Finishing

Sika® Fibercast®-500 can be finished by most finishing techniques as indicated in ACI-302.

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.

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 recommenda-

tions. 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.

SIKA LIMITED

Watchmead
Welwyn Garden City
Hertfordshire, AL7 1BQ
Tel: 01707 394444
Web: www.sika.co.uk
Twitter: @SikaLimited

SIKA IRELAND LIMITED

Ballymun Industrial Estate
Ballymun
Dublin 11, Ireland
Tel: +353 1 862 0709
Web: www.sika.ie
Twitter: @SikaIreland



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