

PRODUCT DATA SHEET

Fibermesh-650 S

Engineered graded macrosynthetic fiber

DESCRIPTION

Fibermesh-650 S is an engineered graded macro-synthetic fibre manufactured to an optimum gradation and highly oriented to allow greater surface area contact within the concrete, resulting in increased interfacial bonding and flexural toughness efficiency. Specifically engineered and manufactured in an ISO 9001 certified manufacturing facility for use as concrete reinforcement.

USES

- Shotcrete
- Industrial flooring
- Slope stabilization
- Precast

CHARACTERISTICS / ADVANTAGES

Fibermesh-650 S is a macro-synthetic fibre for concrete reinforcement used as an alternative to traditional steel wire mesh.

- Simple handling, easy workability
- No-magnetic
- Rustproof
- Structural effectiveness
- Control of drying shrinkage and thermal cracking
- Provides impact, abrasion and shatter resistance
- Improved durability
- Reduces construction time

APPROVALS / CERTIFICATES

- Complies with European Standard EN 14889-2: 2006 Fibres for Concrete Part 2: Class II and carries CE marking
- Complies with ASTM C 1116/C 1116M, Type III fiber-reinforced concrete
- ISO 9001 Quality Assured Facility

PRODUCT INFORMATION

Composition	100% virgin polyolefin
Packaging	1 kg in degradable paper bags, 7 bags per box 10 kg packed in boxes
Shelf life	NA
Storage conditions	Store materials in a cool dry place. Do not store in direct sunlight.
Density	0.91 g/cm ³
Dimensions	Length 50 mm
Melting point	165°C
Ignition temperature	404 °C
Water absorption	Nil

Concreting guidance	Placing :Fibermesh-650 S macro-reinforced concrete can be pumped, sprayed or placed using conventional equipment. Finishing: Fibermesh-650 S macro-reinforced concrete can be finished by normal finishing techniques.
Tensile strength	490 N/mm ²
Modulus of elasticity in tension	4.7 GPa
Resistance to alkalinity	high

APPLICATION INFORMATION

Recommended dosage	The standard application rate for Fibermesh-650 S fibres is a minimum of 3 kg/m ³ of concrete. For special applications, specific performance and dosage recommendations please contact your local Sika representative.
Compatibility	Fibermesh-650 S fibres are compatible with all concrete admixtures and performance enhancing chemicals.
Dispensing	Fibermesh-650 S fibre is added into the truck agitator during or after batching the other concrete materials. After the addition of the fibres, the concrete should be mixed for a sufficient time (batch plant: minimum 5 minutes) at full mixing speed to ensure uniform distribution of the fibres throughout the concrete mix When adding in the wet mixer, the mixing time should be 30 seconds per m ³ to achieve a uniform distribution of the fibres in the concrete.

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.

FURTHER INFORMATION

SPECIFICATION CLAUSE

Fibers for concrete shall be Sika Fibermesh-650 S, 100 percent virgin polyolefin fibres, containing no reprocessed olefin materials. The fibres shall conform to ASTM C1116 Type III and manufactured specifically for the reinforcement of concrete.

or

Fibers for concrete shall be Sika Fibermesh-650 S, 100 percent virgin polyolefin fibres containing no reprocessed olefin materials. The fibres shall conform to EN 14889-2: 2006 Class II and manufactured specifically for the reinforcement of concrete.

The fibres shall be manufactured in an ISO 9001 certified manufacturing facility. Unless otherwise stated, Sika Fibermesh-650 S macro-synthetic fibres shall be mixed at the batch plant, at the recommended rate of ...kgs/m³, and mixed for sufficient time (minimum 5 minutes) to ensure uniform distribution of the fibres throughout the concrete mix.

IMPORTANT CONSIDERATIONS

Sika representatives and Technical managers do not engage in the practice of engineering or supervision of projects and are available solely for service and support of our customers.

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.

LOCAL RESTRICTIONS

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

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