

PRODUCT DATA SHEET

Sika® Fibermesh®-650

Macro-Synthetic Fiber

PRODUCT DESCRIPTION

Sika® Fibermesh®-650 is macro synthetic reinforcing fiber complying with ASTM C 1116, Type III. Sika® Fibermesh®-650 is 100% virgin copolymer fiber designed to provide a uniform three dimensional reinforcement system in the concrete mix. Specifically engineered and manufactured in an ISO 9001 certified manufacturing facility. Sika® Fibermesh®-650 previously Fibermesh 650 or SikaFiber Force 650.

USES

Sika® Fibermesh®-650 can be successfully used as a safe and simple alternative to wire mesh and rebar. Due to its mechanical properties Sika® Fibermesh®-650 is recommended for use in following applications:

- All types of slab-on-ground
- Pavements
- Composite metal deck
- Mass concrete
- Bridge decks
- Sidewalks
- Overlays
- Precast

CHARACTERISTICS / ADVANTAGES

- Uniquely graded fiber design to minimize voids in the concrete matrix.
- Very easy to batch.
- Efficient and cost-effective, three-dimensional reinforcement alternative to steel wire mesh, rebar, and steel fibers.
- Sustainable reinforcement solution by reducing embodied carbon through the replacement of convention steel reinforcement with synthetic structural fibers.
- Reduction in construction time. No cutting, placing, tying, and chairing required.
- Safer and easier to use than wire mesh and rebar.
- Increase durability, ductility, and flexural toughness of concrete.
- Reduces plastic shrinkage, settlement, and drying shrinkage cracking in concrete.
- Improves impact, shatter, and abrasion resistance of concrete.
- Will not corrode, non-magnetic and highly alkali resistant.
- Pumpable safe reinforcement.

APPROVALS / STANDARDS

- Sika® Fibermesh®-650 is UL/ULc certified and approved for usage in all D700, D800 and D900 series decks as an alternate to welded wire fabric.
- Sika® Fibermesh®-650 complies with European Standard EN 14889-2 Fibres for Concrete Part 2: Class II and carries the CE marking.
- Complies with ASTM C1116/C1116M, Type III fiber reinforced concrete and ASTM D7508.

PRODUCT INFORMATION

Packaging	Sika® Fibermesh®-650 are pucked and placed various sizes of "toss-in" degradable bags. The bags are packed into cartons and palletized.
Shelf Life	If stored in dry conditions shelf life is 5 years.
Storage Conditions	Sika® Fibermesh®-650 should be stored in a cool dry warehouse. Protect product from the rain and direct sunlight.
Appearance / Color	<ul style="list-style-type: none"> ▪ Fiber Type: monofilament macro synthetic fiber ▪ Fiber Network: 90,000 fibers/lb
Dimensions	Length: Graded 1.5" & 1.75" (38 & 44mm). Also available in single cut length. Diameter: Graded 0.0165 & 0.0177" (0.42 & 0.45mm). Aspect Ratio: Varies from 76 to 105
Density	0.91
Melting Point	324 °F (162 °C)

TECHNICAL INFORMATION

Resistance to Alkalinity	Excellent
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APPLICATION INFORMATION

Recommended Dosage	The dosage of the Sika® Fibermesh®-650 will vary according to the type of application and the performance requirements of the project. Standard recommended dosage rate of Sika® Fibermesh®-650 is between 3–7.5 lbs/cu. yd. (1.8–4.45 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.
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BASIS OF PRODUCT DATA

Results may differ based upon statistical variations depending upon mixing methods and equipment, temperature, application methods, test methods, actual site conditions and curing conditions.

ENVIRONMENTAL, HEALTH AND SAFETY

For further information and advice regarding transportation, handling, storage and disposal of chemical products, user should refer to the actual Safety Data Sheets containing physical, environmental, toxicological and other safety related data. User must read the current actual Safety Data Sheets before using any products. In case of an emergency, call CHEMTREC at 1-800-424-9300, International 703-527-3887.

OTHER RESTRICTIONS

See Legal Disclaimer.

LEGAL DISCLAIMER

- KEEP CONTAINER TIGHTLY CLOSED
- KEEP OUT OF REACH OF CHILDREN
- NOT FOR INTERNAL CONSUMPTION
- FOR INDUSTRIAL USE ONLY
- FOR PROFESSIONAL USE ONLY

Prior to each use of any product of Sika Corporation, its subsidiaries or affiliates ("SIKA"), the user must always read and follow the warnings and instructions on the product's most current product label, Product Data Sheet and Safety Data Sheet which are available at usa.sika.com or by calling SIKA's Technical Service Department at 1-800-933-7452. Nothing contained in any SIKA literature or materials relieves the user of the obligation to read and follow the warnings and instructions for each SIKA product as set forth in the current product label, Product Data Sheet and Safety Data Sheet prior to use of the SIKA product.

SIKA warrants this product for one year from date of installation to be free from manufacturing defects and to meet the technical properties on the current Product

Data Sheet if used as directed within the product's shelf life. User determines suitability of product for intended use and assumes all risks. User's and/or buyer's sole remedy shall be limited to the purchase price or replacement of this product exclusive of any labor costs.

NO OTHER WARRANTIES EXPRESS OR IMPLIED SHALL APPLY INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. SIKA SHALL NOT BE LIABLE UNDER ANY LEGAL THEORY FOR SPECIAL OR CONSEQUENTIAL DAMAGES. SIKA SHALL NOT BE RESPONSIBLE FOR THE USE OF THIS PRODUCT IN A MANNER TO INFRINGE ON ANY PATENT OR ANY OTHER INTELLECTUAL PROPERTY RIGHTS HELD BY OTHERS.

Sale of SIKA products are subject to the Terms and Conditions of Sale which are available at <https://usa.sika.com/en/group/SikaCorp/termsandconditions.html> or by calling 1-800-933-7452.

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Product Data Sheet

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