

## PRODUCT DATA SHEET

# SikaFiber® Enduro®-600

### MACRO-SYNTHETIC FIBER

#### PRODUCT DESCRIPTION

SikaFiber® Enduro®-600 is macro synthetic reinforcing fiber. SikaFiber® Enduro®-600 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. SikaFiber® Enduro®-600 previously Enduro 600 and SikaFiber Force 600.

#### USES

SikaFiber® Enduro®-600 can be successfully used as a safe and simple alternative to wire mesh and rebar. Due to its mechanical properties SikaFiber® Enduro®-600 is recommended for use in following applications:

- Sprayed concrete
- Precast
- Mining
- Tunnel linings
- Channel linings
- Slope stabilization
- Slab on ground
- Pavement

#### CHARACTERISTICS / ADVANTAGES

- Geometrically engineered to resist matrix pullout
- Increases flexural toughness
- Reduces rebound
- Increases cohesion and reduces segregation
- Increases impact and shatter resistance
- Non-magnetic
- Rustproof
- Chemically inert and alkali proof
- Reduced wear on concrete pumps and hoses
- Safe and easy to handle
- Simplified logistics
- Economical alternative to steel wire mesh and/or steel fibers
- Reducing embodied carbon through the replacement of convention steel reinforcement with synthetic structural fibers.

#### APPROVALS / STANDARDS

- Complies with ASTM C1116 / C1116M Type III Fiber Reinforced Concrete and ASTM D7508 / D7508M
- Complies with European Standard EN 14889-2: 2006 Fibres for Concrete Part 2: Class II

#### PRODUCT INFORMATION

<b>Packaging</b>	SikaFiber® Enduro®-600 are packed into cartons and palletized.
<b>Appearance / Color</b>	<ul style="list-style-type: none"> <li>▪ <b>Fiber Type:</b> grey monofilament macro synthetic fiber</li> <li>▪ <b>Fiber Network:</b> 18,700 fibers/lb (41,200 fibers/kg)</li> </ul>
<b>Shelf Life</b>	If stored in dry conditions shelf life is 5 years.
<b>Storage Conditions</b>	SikaFiber® Enduro®-600 should be stored in a cool dry warehouse. Protect product from the rain and direct sunlight.

Density	0.91
Dimensions	<b>Length:</b> Available in 2 or 2.4" (52 or 60 mm) lengths <b>Equivalent Diameter:</b> 0.03" (0.81mm). <b>Aspect Ratio:</b> 64 (at 52 mm length) or 74 (at 60 mm length)
Melting Point	324 °F (162 °C)

## TECHNICAL INFORMATION

Resistance to Alkalinity	High
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## APPLICATION INFORMATION

Recommended Dosage	The dosage of the SikaFiber® Enduro®-600 will vary according to the type of application and the performance requirements of the project. Standard recommended dosage rate of SikaFiber® Enduro®-600 is between 4–15 lbs/cu. yd. (2.4–9 kg/m <sup>3</sup> ) 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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Mixing	SikaFiber® Enduro®-600 can be added directly to the concrete mixing system after the batching of the ingredients and mixed for 4 to 5 minutes or 70 revolutions. The addition of SikaFiber® Enduro®-600 at the recommended dosage rates may decrease the slump; however, additional water should not be added. Only a water reducing or high range water reducing admixture should be used to adjust concrete to the desired workability.
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### Application

The addition of SikaFiber® Enduro®-600 at the normal recommended dosage rate does not require any mix design or application changes. The fiber concrete can be mixed, sprayed or placed using conventional equipment.

### Tooling & Finishing

SikaFiber® Enduro®-600 can be used in power/hand troweled concrete, colored and broom finished concrete. Fiber reinforced concrete can be finished by most finishing techniques as indicated in ACI-302. Proper timing and workmanship are important when using a macro synthetic fiber to insure fiber is not elevated at the surface.

## 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.

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.

## ENVIRONMENTAL, HEALTH AND SAFETY

For further information and advice regarding transportation, handling, storage and disposal of

## 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](http://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.**

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