SikaFiber® HP

Monofilament Polypropylene Concrete Micro Fiber

Alkali resistance:

CONDITIONS AND CURING CONDITIONS.

Description SikaFiber® HP is a new generation of micro monofilament polypropylene fiber for use in concrete. SikaFiber® HP is specifically designed for the purpose of controlling plastic shrinkage and settlement cracking. SikaFiber* HP meets the requirements of ASTM C-1116, Type III and ICC-ES AC32 and is recognized in ICC ES evaluation report ESR-1699. Section 3.1.1, Plastic shrinkage reinforcement at 0.2 lb/cu. yd (0.3 kg/m3). **Applications** SikaFiber® HP creates, due its ultra thin diameter and ultra high strength, an extremely dense three dimensional network of reinforcing fibers in the concrete. SikaFiber® HP acts mechanically by reinforcing the concrete with fiber network coated with mortar. SikaFiber® HP does not affect curing process chemically and SikaFiber® HP does not absorb water. SikaFiber® HP can be used in all types of concrete such as residential or commercial slabs on ground (SOG), concrete overlays, precast applications, shotcrete or stucco. Synthetic fibers help the concrete at early ages, which is especially beneficial to precasters where stripping time and handling is important. SikaFiber® HP can decrease plastic and drying shrinkage cracking and increase impact resistance in young concrete. SikaFiber® HP when used in shotcrete applications will increase the compaction and density of shotcrete, reducing rebound and permitting thicker layers per pass. SikaFiber* HP can be used to prevent explosive spalling of concrete when concrete is exposed to fire. **Benefits** ■ Reduces the rate of hydration of cement and controls concrete temperature. ■ Higher fiber count per pound than standard monofilament fibers. ■ Virtually invisible in concrete. ■ Allows for lower dosage compared to other monofilament types of fiber. ■ Reduces the formation of plastic shrinkage cracking in concrete. ■ Provides multi-dimensional reinforcement. ■ Improves impact, shatter and abrasion resistance of concrete. ■ Prevents explosive spalling of concrete at higher temperatures. ■ Enhances durability and toughness of concrete. ■ Reduces bleeding. ■ Excellent finishability. **Typical Data** Fiber type: Monofilament polypropylene micro fiber Fiber length: 0.5" (6 mm) 0.91 Specific gravity: E-modulus: 800 ksi

How to Use

Dosage



Standard recommended dosage rate of SikaFiber* HP is 0.5 up to 1 lb/cu. yd. of concrete or as required by specific mix design. When used in application for fire resistance, the recommended dosage is 1.7-2.0 lbs./cu. yd. Dosages outside the recommended range may be used for special requirements and applications, for further detail please contact your local regional office or the Technical Service Department at 1-800-933-7452.

RESULTS MAY DIFFER BASED UPON STATISTICAL VARIATIONS DEPENDING UPON MIXING METHODS AND EQUIPMENT, TEMPERATURE, APPLICATION METHODS, TEST METHODS, ACTUAL SITE

Excellent Alkali resistance

PRIOR TO EACH USE OF ANY SIKA PRODUCT, THE USER MUST ALWAYS READ AND FOLLOW THE WARNINGS AND INSTRUCTIONS ON THE PRODUCT'S MOST CURRENT PRODUCT DATA SHEET, PRODUCT LABEL AND SAFETY DATA SHEET WHICH ARE AVAILABLE ONLINE AT HTTP://USA.SIKA.COM/ OR BY CALLING SIKA'S TECHNICAL SERVICE DEPARTMENT AT 800-933-7452. NOTHING CONTAINED IN ANY SIKA MATERIALS RELIEVES THE USER OF THE OBLIGATION TO READ AND FOLLOW THE WARNINGS AND INSTRUCTION FOR EACH SIKA PRODUCT AS SET FORTH IN THE CURRENT PRODUCT DATA SHEET, PRODUCT LABEL AND SAFETY DATA SHEET PRIOR TO PRODUCT USE.

Mixing	SikaFiber® HP can be added directly to the concrete mixing system during or after the batching of the ingredients and mixed at high speed for four to five minutes. Additional mixing does not adversely affect the distribution or overall performance of SikaFiber® HP. The addition of SikaFiber® HP at the recommended dosage rates to a given mix 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 required for placement.
Application	The addition of SikaFiber® HP at the normal recommended dosage rate does not require any mix design or application changes. A water reducer or high range water reducer is recommended in concrete placements where improved workability and finishability are desired.
Tooling & Finishing	Fiber reinforced concrete can be finished by most finishing techniques. SikaFiber® HP does not affect the finishing characteristics of concrete. SikaFiber® HP can be used in power/hand troweled concrete, colored and broom finished concrete.
Packaging	SikaFiber® HP is available in 0.5" (13 mm) length in various pack sizes in degradable bags.
Storage and Shelf Life	SikaFiber® HP should be stored in dry warehouse. Protect product from the rain.
	If stored in dry conditions shelf life is 5 years.

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

All information provided by Sika Corporation ("Sika") concerning Sika products, including but not limited to, any recommendations and advice relating to the application and use of Sika products, is given in good faith based on Sika's current experience and knowledge of its products when properly stored, handled and applied under normal conditions in accordance with Sika's instructions. In practice, the differences in materials, substrates, storage and handling conditions, actual site conditions and other factors outside of Sika's control are such that Sika assumes no liability for the provision of such information, advice, recommendations or instructions related to its products, nor shall any legal relationship be created by or arise from the provision of such information, advice, recommendations or instructions related to its products. The user of the Sika product(s) must test the product(s) for suitability for the intended application and purpose before proceeding with the full application of the product(s). Sika reserves the right to change the properties of its products without notice. All sales of Sika product(s) are subject to its current terms and conditions of sale which are available at http://usa.sika.com/ or by calling 800-933-7452.

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 shelf life. User determines suitability of product for intended use and assumes all risks. Buyer's sole remedy shall be limited to the purchase price or replacement of product exclusive of labor or cost of labor.

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.

 Sika Corporation
 Sika Canada Inc.

 201 Polito Avenue
 601, Delmar Avenue

 Lyndhurst, NJ 07071
 Pointe-Claire, QC H9R 4A9

 Phone: (201) 933-8800
 Phone: (514) 697-2610

 Fax: (201) 933-6225
 Fax: (514) 697-3087

 usa.sika.com
 can.sika.com

Regional Information and Sales Centers. For the location of your nearest Sika representative, contact your regional center.

U.S.: Northeast: Fairless Hills, PA, Phone: (215) 295-6600 North Central: Ottawa, IL 61350, Phone: (815) 431-1080 South East: Conyers, GA, Phone: (770) 760-1300 South Central: Mesquite, TX, Phone: (972) 289-6480 Western Region: Santa Fe Springs, CA, Phone: (972) 289-6480

Canada: Ontario: Mississauga, ON, Phone: (905) 795-3177 **Alberta:** Edmonton, AB, Phone: (780) 486-6111

Quality Certification Numbers: Lyndhurst: FM 69711 (ISO 9000), FM 70421 (QS 9000), Marion: FM 69715, Kansas City: FM 69107, Santa Fe Springs: FM 69408



PRIOR TO EACH USE OF ANY SIKA PRODUCT, THE USER MUST ALWAYS READ AND FOLLOW THE WARNINGS AND INSTRUCTIONS ON THE PRODUCT'S MOST CURRENT PRODUCT DATA SHEET, PRODUCT LABEL AND SAFETY DATA SHEET WHICH ARE AVAILABLE ONLINE AT HTTP://USA.SIKA.COM/ OR BY CALLING SIKA'S TECHNICAL SERVICE DEPARTMENT AT 800-933-7452. NOTHING CONTAINED IN ANY SIKA MATERIALS RELIEVES THE USER OF THE OBLIGATION TO READ AND FOLLOW THE WARNINGS AND INSTRUCTION FOR EACH SIKA PRODUCT AS SET FORTH IN THE CURRENT PRODUCT DATA SHEET, PRODUCT LABEL AND SAFETY DATA SHEET PRIOR TO PRODUCT USE.