

ALP-FIX® MICROFIBRE 18

Micro Fibers for Concrete and Mortar

Polypropylene micro fibers easily distributed in concrete preventing micro-cracks, reducing its abrasion and permeability.

Applications:

- Floor screeds - to prevent micro shrinkage cracks
- Industrial floors - improved chemical and abrasion resistance
- Parking lots improved petrol and oil resistance
- Prefabricates in concrete - higher impacts strength
- Masonry and self-leveling mortars - increased abrasion resistance
- Shotcrete applications - fire resistant concrete

Technical Effects:

Physical effects on concrete	Technical advantages
Compensation of plastic shrinkage tensions	no cracks being entries for water and corrosive solutions e.g. saline solutions
Reduction of capillarity	Less penetration of water and chemical substances Freeze- thaw resistance increased
“Closed surface” effect	Abrasion resistance improved Aging resistance improved
Impact resistance effect	Higher green impact resistance, sooner remolding of precast concrete
Rheology effects	No segregation and of components Shotcrete - Reduction of rebound
Water vapor distribution by new micro channels during fire	Fire resistant concrete – no spalling for a longer period of time

Certificates:

The product meets all the requirements of standard DIN-EN 14889-2:2007; Fibers for concrete - Part 2: Polymeric fibers Class I. and the Austrian Directive for Fiberconcrete “ Richtlinie für Faserbeton” ed. Juli 2008

1. **Report of examination Nr.1256/779/10** date:18.05.2010 by Materialprüfanstalt für das Bauwesen - MPA Beethovenstr. 52, D-38106 Braunschweig, Germany;
2. **Report Nr. 22002/2011** date 11.11.2011 by Bautechnisches Institut A-4048 Puchenau, Karl Leitl Str.2, Austria: acc. to the Austrian directive „ Faserbeton Juli 2008“

Health and environment protection:

Detailed information on health, safety, data relating to ecology, the toxicological properties of the material, etc. are available in the **Material Safety Data Sheet** available on request. The product may contaminate water, so it should not be disposed of directly into sewers, soil or surface water.

Disclaimer: Due to the variety of uses of each product and the specific characteristics of the user is required to conduct self-tests. Data products and other technical information should be seen merely as a guide, they describe the characteristics of the products collected during production and application. They do not constitute a warranty.

TECHNICAL DATA:

PARAMETER	VALUE
Chemical Basis	pure polypropylene
Colour	natural white
Specific density: acc. to EN 542 at +20 °C	0,91 g/cm ³
Yarn Count:	2,2 dtex
Tensile strength:	400 N/mm ²
Elongation at break:	40-70%
Tensile strength in rel. yarn count:	>35 cN/tex
Fibre profile :	circular
Fibre diameter: acc to EN ISO 2062	18 +- 1 microns
Fibre length alternatives:	6 mm, 12 mm, 18mm
Dispersibility in concrete: as mixing time	1min – 5 min

DOSAGE:

- 1.For prevention of shrinkage cracks: 0,35 – 0,40 kg/m³ concrete
- 2.For prevention of concrete spalling in fire: 1,20 – 1,50 kg/m³ concrete

Mixing:

Apply direct into the mixing plant before or after addition of water.

Mixing in ready-mixed concrete lorry: 5min
 Mixing in an industrial mixer: 1 min/m³ concrete

Impact on consistency of concrete: C25/30 with 0,9kg/m³ fibers:

- slump: +0,07
- spread: -3,5 cm
- Ve-Be time : +7 sec

PACKAGING:

Bulk in 250 -500 kg card board boxes
 Paper sachets 0,4 kg or 0,6kg soluble in concrete on demand

STORAGE:

Keep under dry conditions < 65% rel.hum. & Temp < 35°C

DURABILITY:

under above storage conditions: 36 month

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