

ALP-FIX[®] MICROFIBRE 30

Micro Fibers for Concrete and Mortar

Product:

Polypropylene fibers, easily distributed in concrete preventing cracks, abrasion and reducing the permeability.

Applications:

- Floor screeds - to prevent micro shrinkage cracks
- Industrial floors - improved chemical and abrasion resistance and
- 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 of ALP-FIX-FIBRE	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 and Standards:

The product meets all the requirements of standard DIN-EN 14889-2:2007;

fibers for concrete - Part 2: Polymeric fibers Class I.

1. **Report of examination Nr.1465/240/07** dated 09-11-2007 made by Materialprüfanstalt für das Bauwesen - MPA - , Beethovenstr. 52, D-38106 Braunschweig, Germany; Notified body 0761-CPD
2. **Report Nr. 1762/547/08-B** dated of 01-10-2008 made by Materialprüfanstalt für das Bauwesen - MPA - , Beethovenstr. 52, D-38106 Braunschweig, Germany; Notified body 0761-CPD
3. **Report Nr. 22248** by Bautechnisches Institut A-4048 Puchenau, Karl Leitl Str.2, Austria, according tot he Austrian construction directive “Faserbeton Juli 2008 “

Colour:

Natural colour of PP - white

Yarn Count:

7,0 dtex

<u>Tensile strenght:</u>		400 N/mm ²
<u>Tensile strength in relation to yarn count:</u>		>35 cN/tex
<u>Chemical basis:</u>		pure polypropylen
<u>Specific density:</u>	acc. to EN 542 at +20 °C	0,91 g/cm ³
<u>Fibre diameter:</u>		30 +- 2 microns
<u>Fibre lenght:</u> Type 6mm, 12mm,18mm		6mm±0,5; 12± 0,5mm; 18,0 ± 0,5 mm
<u>Fibre profile :</u>		circular
<u>Elongation at break:</u>		40 -70%.
<u>Dispersibility in concrete:</u>		1-5 min mixing time
<u>Dosing:</u>	1. For prevention of shrinkage cracks: 2.For prevention of spalling in case of fire:	0,6 - 1,0 kg/m ³ concrete 1,8 - 2,0 kg/m ³ concrete
<u>Mixing time :</u>	Apply direct to the mixing plant after the addition of water. Mixing in ready-mixed concrete lorry: Mixing in an industrial mixer:	 3-5 min 1min/m ³ concrete
<u>The impact on the consistency of concrete:</u> <u>C25/30 with 0,9kg/m³ fibers:</u>	slump: spread: Ve-Be time :	+0,09 - 3,2 cm +7 sec
<u>Packaging:</u>		Bulk 250 – 500 kg card boar boxes 0,6 and 0,9 kg concrete soluble paper sachets
<u>Storage:</u> Temp	Keep under dry conditions	< 65% rel.hum. and < 35°C
<u>Durability:</u>	under above storage conditions	36 month
<u>Health and environment protection:</u>	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.	