

# POLYFIX PP

## Polypropylene fiber micro-reinforcement for concrete/mortar

### 1. Product characteristics

Polypropylene fiber admixture for concrete/mortar

- prevents shrink cracks formation
- excellent mixing ability
- reduces segregation of cement milk
- increases frost resistance, decreases absorbability
- increases abrasion resistance
- slows down concrete carbonation
- chemically resistant and eco-friendly

### 2. Use

**POLYFIX PP** fibers are applied as an admixture into the fresh concrete, air-placed concrete, mortar, plasters etc. The correct use of fibers reduces cone settling of 10%. **POLYFIX PP** fibers are suitable economic alternative to steel webs in a concrete structures, if they are proposed only to prevent shrink cracks. **POLYFIX PP** fibers are lubricated during manufacturing to improve the dispersion in a concrete mixture. Admix of fibers prevents shrink cracks, distinctively improves frost resistance, water tightness, and wear resistance of concrete and mortar. As a result the atmospheric and mechanical resistance of surface is distinctively increased. The admixture of fibers prove good especially when applied for rain sidewalks, exterior and interior handling areas, water buildings etc. Furthermore, the PP fibers addition improves a fire-resistance of concrete, prevents delamination in case of long-term contact with fire or high temperatures.

### 3. Physical and mechanical parameters

Material	polypropylene C <sub>3</sub> H <sub>8</sub>
Fiber diameter (µm)	18
Fiber length (mm)	4/12
Specific weight (g/cm <sup>3</sup> )	0.9
Softening point (°C)	145
Flash point (°C)	215
Surface	lubricated

### 4. Test certificates

The product is certified according to § 12 of Act No. 22/1997 Coll. and according to § 6 of Government Regulation No. 163/2002 Coll. as amended.

Continuous independent production quality control is provided by AZL 1687 LABBET®.

Supervision of Quality Management Systems, Environmental Relations and OSH is carried out by Certification Body No. 3029

### 5. Instruction for preparation and application

**POLYFIX PP** fibers can be added as an admixture during the preparation of mixture directly to mixing device or to concrete agitator. **POLYFIX PP** fibers can be added directly to the mixing device in a paper bag which will in the wet concrete mixture dissolve. Standard mixing time after adding the fibers is 5 minutes.

Recommended specific consumption for common concrete mixture amounts to approximately 0.6 – 1.0 kg/m<sup>3</sup>. For concrete with higher amount of cement is recommended to increase dosage for 15 – 20%. For fine concrete and mortar is also recommended higher dosage.

For fine mortar and screeding is recommended to use 4 mm long fibers. For coarse mortar and concrete are suitable 12 mm fibers.

### 6. Packing and storage

The product is supplied in paper bags of 0.6 kg weight or of 25 kg weight. Upon request individual packing is possible. **POLYFIX PP** fibers must be protected from humidity while transporting and storing. The shelf life in original undamaged packing is unlimited.

### 7. Health protection at work

This product is not classified as dangerous. The fibers stuck to the skin rinse with running water, from clothes remove by air flow. The fibers are neither toxic nor irritable in contact with eyes or skin, there is no health risk if accidentally swallowed.

## 8. Waste disposal

During disposal of contaminated packages or clearing debris from product, it is necessary to follow the Act No. 185/2001 Coll. on waste, as amended.

## 10. Important notice

All information mentioned above, especially advice for processing and application of our products, is based on our knowledge from the development of chemical products and on years of experience with applications in practice at standard conditions, and proper storage and use. Due to the differing conditions during processing, high count of products, varying nature and modifications of base and other external influences, the procedure based on the information provided or on other written or oral recommendations, may not always ensure satisfactory working results. BETOSAN s.r.o. assumes no liability for provided advice or recommendation. The applicator must prove, that he submitted complete information on time and in writing which is necessary for a proper detailed assessment by BETOSAN s.r.o. The applicator must test the suitability of the products for the intended application. Proprietary rights of third parties, above all, must be taken into account. All received are orders subject to our current "General sales and delivery conditions ". Please always make sure that you follow the most recent issue of the Technical Data Sheet. It is available, along with other information, at our Technical Department or at [www.betosan.cz](http://www.betosan.cz)

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