



Functional Fibres for Concretes, Industrial Floorings, Precast Concrete Elements ...



Since the 1980's the **PB EUROFIBER** brand has made a name for itself as a performance additive to improve construction materials.

Our functional fibres are used to optimise product and processing properties in a wide variety of technical products including concretes, cement-based mortars, adhesives and dry-mix compounds.

PB EUROFIBER has been successfully used to enhance the fire resistance of concretes and cement mortars since the 1990's.

Application Sectors

- Concretes
- Industrial floorings
- Screeds
- Precast concrete elements
- Fire-resistant concretes
- Mortars
- etc.

Fibre Properties

- Density: 0.91 g/cm³
Lighter in weight than PAN/acrylic fibres (1.18 g/cm³) and glass fibres (2.6 g/cm³)
- Resistant to alkalis
- Chemically resistant to acids, bases, salts and most solvents
- Outstanding dispersibility
- Corrosion-free
- Antistatic
- Melting point: approx. 165 °C
- Auto-ignition temperature: > 320 °C
- Service temperature range: up to 120 °C

Typical Application Advantages

- Reduction of shrinkage cracking
- Increased green strength
- Optimised processing properties
- Improved freeze-thaw resistance
- Higher impact strength
- Increased flexural strength / tensile splitting strength
- Improved fire resistance (reduction of spalling)

Product Range (other products also available)

PP-Monofilament Fibres

Product		Fibre Diameter µm	Fibre Length mm	Usual Dosage kg/m ³	Fibre Count approx. 10 ⁶ /kg	Theoretical Length approx. km/kg	Certifications
PB EUROFIBER REF 506	20 / 6	19.8	6.0	0.9	600	3600	(1, 2)
PB EUROFIBER REF 512	20 / 12	19.8	12.0	0.9	300	3600	(1, 2)
PB EUROFIBER REF 520	20 / 18	19.8	18.0	0.9	200	3600	(1, 2)
PB EUROFIBER PRO-MIX	32 / 6	31.7	6.0	0.9	230	1400	(1, 2, 3)
PB EUROFIBER PRO-MIX	32 / 12	31.7	12.0	0.9	115	1400	(1, 2)
PB EUROFIBER PRO-MIX	32 / 18	31.7	18.0	0.9	70	1400	(1, 2)
PB EUROFIBER MF 1217	15 / 12	15.4	12.0	0.5	500	5900	(1, 2)

PP-Split-Film Fibres

Product	Elementary Fibril µm	Fibre Length max. mm	Usual Dosage kg/m ³	Fibre Count approx. 10 ⁶ /kg	Theoretical Length approx. km/kg	Certifications
PB EUROFIBER REF 306	38 x 200	6.0		23	140	(1, 2)
PB EUROFIBER REF 310	38 x 200	10.0	0.9 - 1.0	14	140	(1, 2)
PB EUROFIBER REF 315	38 x 200	15.0	0.9 - 1.0	9	140	(1, 2)
PB EUROFIBER REF 320	38 x 200	20.0	0.9 - 1.0	7	140	(1, 2)

Technical Data

	Multifil / Monofil Fibres	Split-Film Fibres
Polymer	Polypropylene (PP)	Polypropylene (PP)
Fibre cross-section	round	rectangular / flat
Fibre diameter	13 - 145 µm	38 x 200 µm
Fibre length	2.2, 3, 4.6, 6, 12, 18 mm	2, 3, 6, 10, 15, 20 mm
Elongation at break	approx. 100 - 200 %	< 12 %
Tensile strength	> 220 N/mm ²	> 340 N/mm ²
Elastic modulus	approx. 1000 N/mm ²	approx. 4000 - 6000 N/mm ²

- Other fibre geometries on request
- Certifications/official approvals
 - (1) DIBt certification (German Institute of Construction Technology) (Certification no.: Z-3.73-1878)
 - (2) CE certified according to System 1 (with annual third-party monitoring)
 - (3) BB2G classification by ÖVBB Guidelines
- Packaging options
Small bags: 50-5000 g / Large bags: 15-25 kg
Big Bags: approx. 200-500 kg

All information and data in this brochure are provided without engagement.
We recommend evaluation of product suitability by appropriate testing before use.