POLYMONO

Monofilament synthetic polypropylene micro fiber

POLYMONO is a monofilament synthetic micro fiber made from 100% virgin polypropylene, designed for concrete, shotcrete, mortar and cementitious applications. The three-dimensional distribution of fibers helps improve crack resistance, limit micro-cracking and increase material reliability throughout service life.

100% POLYPROPYLENE
Monofilament micro fiber

KEY BENEFITS

- Improves crack resistance of concrete structures.
- Three-dimensional fiber distribution helps reduce freeze/thaw damage and penetration by water and chemicals.
- High binding ability within the matrix helps inhibit micro-cracks.
- Easy to dose and mix directly into concrete.

APPLICATIONS

- Repair mortars
- Plaster applications
- Construction chemicals
- Screed concrete
- Shotcrete
- Tunnel applications
- Residential buildings
- Coating concrete
- Industrial floors
- Field concrete
- Pre-cast applications

PRODUCT TYPES

POLYMONO 3	POLYMONO 6	POLYMONO 12	POLYMONO 18
Construction chemicals	Construction chemicals	Concrete applications	Concrete applications

APPLICATION RANGE

600 g - 2 kg/m³

per m³ of mix

PACKAGING

600 g and 900 g water-soluble PE packs; 5 kg plastic bags; custom packaging alternatives according to application requirements.

TECHNICAL CHARACTERISTICS

Technical data and application guidance.

1 DOSING AND MIXING

Add the micro synthetic fibers to the ready-mix truck at the recommended dosage for each cubic meter. After the final dosage is added, mix at high speed for 5-6 minutes to obtain adequate dispersion.

2 STORAGE AND DISPOSAL

Store fibers in the original packages between +5 °C and +30 °C, protected from moisture and direct sunlight. Disposal of the product and packaging is the responsibility of the end user.

160 °C
Melting point

0.91
g/cm³

T TECHNICAL CHARACTERISTICS

Characteristic	Value / description	Reference
Composition	100% virgin polypropylene	-
Type	Monofilament micro fiber	-
Impurity	First-class pure polypropylene without olefin, polyamide or nylon	-
Cross section	Circular	-
Standard	EN 14889 Part II Type 1A	ASTM C1116 Type III
Tensile strength	467 - 548 MPa	-
Elastic modulus	4048 - 5674 MPa	-
Elongation	20 - 25%	-
Specific weight	0.91 g/cm³	-
Durability	6.5 - 7.0 g/denier - high strength	-
Color	Transparent	-
Melting point	160 °C	-
Number of fibers	120 million+ / kg	-
Surface area	140 m²/kg	-
Chemical resistance	Alkali and acid resistance	-
Oxidant resistance	Excellent	-
Biological resistance	Excellent	-
Cement compatibility	Excellent	-
Water absorption	N/A - hydrophobic	-