

## Technical Datasheet

# POLYPROPYLENE FIBERS

### Description

Synthetic fibers of modified polypropylene for use in fiber-reinforced concrete and mortars.

Polypropylene fibers reduce the formation of plastic shrinkage cracks on concrete and increase the impact and shatter resistance. Synthetic fibers also increase abrasion resistance in concrete floors and reduce bleeding. Moreover, they improve the elasticity and cohesiveness of mortars and screeds during placing.

Certified with the CE marking, according to EN 14889-2.

### Fields of application

Polypropylene fibers are specifically designed for use in cases where cracks are created due to plastic shrinkage or deformations, e.g. large concrete slabs, prefabricated concrete elements, floors with in-floor heating, etc. They are used where cohesiveness of screeds or concrete is required during the placing, e.g. inclined slabs, etc. Polypropylene fibers are also used in shotcrete (gunite) applications in order to increase the compaction and density of shotcrete.

### Technical data

Material:	modified polypropylene
Color:	white
Diameter:	25 ( $\pm 10\%$ ) $\mu\text{m}$
Length:	12 ( $\pm 10\%$ ) mm
Density:	0.91 $\text{g/cm}^3$
Melting point:	160-170°C
Ignition point:	570°C
Number of fibers per kg:	$120 \times 10^6$
Modulus of elasticity:	1.6 GPa
Tensile strength:	400 ( $\pm 10\%$ ) $\text{N/mm}^2$
Tensile elongation:	25 ( $\pm 10\%$ )

### Directions for use

Polypropylene fibers are added directly to the concrete or mortar mixing system, while batching the ingredients.

### Consumption

600-1200  $\text{gr/m}^3$  of concrete or cement mortar.

### Packaging

- 900gr dispersable paper bag.
- 600gr plastic bag.

### Storage

In closed packaging, stored in dry conditions.

### Remarks

Polypropylene fibers do not replace concrete static reinforcement.

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