

## / Description

FIBRE SUPER 40 is a structural polymer fibre, produced in additive polypropylene, by means of a particular process of extrusion, drawing and molecular stabilisation.

The special shape allows better anchoring to the cement base, without compromising its optimal distribution within the conglomerates during mixing, significantly reduces shrinkage cracking, improves durability and increases the ultimate tensile and fatigue strength, as well as the ductility of the conglomerate. It is suitable for the production of fibre-reinforced conglomerates in general, intended for the construction of industrial flooring and in the production of prefabricated products and cast concrete.



## / Main features

- High ductility;
- high-performance;
- increased flexural tensile strength;
- suitable for outdoor casting;
- suitable for casting in aggressive environments.

## / Benefits

- Optimal fibre-cement adhesion, homogeneous and reactive reinforcement throughout the entire section of the conglomerate;
- ensures the homogeneous and uniform distribution of stresses in the mixture, avoiding the formation of cracks caused by shrinkage during the setting phase;
- improves impact resistance, with increased fatigue resilience, increases load-bearing capacity with less thickness;
- contributes to improving the durability and fire resistance of concrete;
- shorter production time of the products.

## / Technical data

Composition:	virgin polypropylene synthetic fibre
Shape:	undulating-notched monofilament
Colour:	natural grey
Length:	40 mm
Section:	0.49 mm <sup>2</sup>
Equivalent diameter:	0.78 mm
Density:	(20°C) 0.91 kg/mm <sup>3</sup>
Tensile strength:	640 MPa
Elastic modulus:	2500 MPa
Melting point:	235°C
Water absorption:	0.01%
Resistance to the alkaline agents of cement:	excellent
Glass transition temperature:	0°C

## / Method of use

FIBRE SUPER 40, if dosed directly into the system premixer, must be added after loading the various concrete components, while if dosed directly onto the loading belt of the mixer, it is advisable to add it as the first component of the mixture, followed by at least one third of the mixing water. Once added, it is advisable to prolong the mixing for at least 60" in the case of a forced mixer or for approximately ten minutes in the case of mixing in a concrete mixer, in order to allow optimal and uniform dispersion of the fibres.

FIBRE SUPER 40 does not prevent cracks resulting from poor sizing of the concrete mixture, neither does it replace conventional methods of proportioning the mixture.

## / Dosage

The recommended dosage of FIBRE SUPER 40 ranges from 1.5 to 2 kg per m<sup>3</sup> depending on the desired performance. Different dosages are possible in relation to the specific working conditions after consulting our technical service. For an optimal result, preliminary tests are suggested before use on site.

## / Fields of application

- Concrete floors, parking areas, depots, storage areas;
- airport runways, port docks;
- foundation castings, scaffolding and slabs;
- production of non-structural prefabricated elements, such as blocks, panels, kerbs, gutters, New Jersey bricks, etc.;
- production of shotcrete.

## / Storage

Unlimited for packages that are intact and kept sealed in their original packaging, **stored in a dry environment away from moisture.**

## / Warnings

Do not dispose of the product and empty containers in the environment.

This information is provided for the sole purpose of allowing the product to be used in the most correct and safe way. We decline all responsibility, direct and indirect, for damage resulting from improper or reckless use, failure to apply the law and failure to comply with the procedures and dosages indicated.

## / Packaging

5kg bags.