

/ Description

Extruded polypropylene macro synthetic formed into a crimped profile. The sinusoidal shape improves the bond within the concrete and so reduces pull-out and enhances concrete's performance providing toughness and ductility to the material. Thanks to the very high alkali resistance is strongly advised for FRC to be placed in aggressive areas, where a high chemical resistance is needed, and corrosion from chlorides can happen. Macro fibers can be easily dispersed in the concrete mix to ensure a homogeneous FRC.



/ Fiber of application

Macro fibers can be used in many construction applications. They include:

- Internal/external floor slabs.
- External hardstandings and pavements.
- Non structural precast concrete elements/MCP
- Agricultural areas.
- Marine/coastal defence concrete
- Shotcreting applications.

/ Technical features

Technical Information	
Fiber class	II
Water adsorption	Null
Alkali Resistance	High
Melting point (°C)	c.a 65.000
Number of fibres per kg	155-165
Decomposition temperature (°C)	280

Essential characteristic in accordance to EN 14889-2	Performance
Type of polymer	Polypropylene compound
Colour	White-transparent
Density [kg/m ³]	910
Longitudinal shape	wavy
Section shape	Irregular
Diameter [mm]	0,75
Length [mm]	40
Length / Diameter Ratio	53,3
Toughnesses index (N/mm ²)	448
Elastic modulus (N/mm ²)	3.640
Effect on the consistency of the concrete [fiber dosage in kg / m ³ , Vebe time in s with fibers]	3,3 9,6

/ Dosage

Can range from 1.5 to 9.0 kg/m³.

However, dosage rates are dependent on the specific application.

The use of macro synthetic fibre MasterFiber 246 SPA as a replacement of the structural steel reinforcement can be done according to the DM. 17/01/2018 (Norme Tecniche per le Costruzioni) e Circolare n. 7/2019.

/ Packaging and storage

The standard packaging is available in 65 gr puck in a plastic bags of 6 kg in weights to suit dosing into the mixer. Please store in a dry place.

Material is very stable, no foreseen hazards. Protect against fire.

/ Directions for use

Macro fiber is best dispersed when added after water and admixture, preferably during the aggregates load on the loading belt in the ready mix plant. If a forced action pan mixer, or equivalent, is used, macro fibers are added after all the concrete ingredients.

We advise to mix for 5 min. in order to assure a homogeneous concrete.

/ Certifications

In compliance with the European Regulation (EU No 305/2011 and EU No. 574/2014) the product is provided with the CE marking according to UNI EN 14889-2 and the relative DoP (Declaration of Performance).