

Readymesh PS

Monofilament macro-fibre for structural spritz-beton and prefabrication



Structural polyolefin macro-fibre, high performance, for improved adherence specific for structural applications, even as a substitute for conventional steel reinforcements. Readymesh PS increases the absorption of energy of the product in case of breakage and yielding, it gives the concrete a greater resistance to the forces of traction/bending, it reduces the risk of breakage of the concrete component in the corners and edges. It also reduces the phenomenon of segregation of the concrete during the installation and it reduces the risk of corrosion of the reinforcing rods (if present) due to the reduction in cracking from plastic shrinkage. Readymesh PS are available in three different lengths: Readymesh PS-300 = 30 mm; Readymesh PS-380 = 38 mm; Readymesh PS-480 = 48 mm

CUSTOMS CODE: 5404 1200

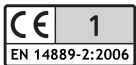
COMPONENTS: Single-component

APPEARANCE: Fibers

AVAILABLE COLORS: Transparent

PACKAGING AND DIMENSIONS: Hydro degradable bag 4 kg - PS-380 Box: 4 x (Hydro degradable bag 4 kg) - PS-480 Box: 4 x (Hydro degradable bag 4 kg) - PS-300 Box: 4 x (Hydro degradable bag 4 kg)

OBTAINED CERTIFICATIONS AND REGULATIONS



FIELDS OF APPLICATION

It can be used where widespread structural and three-dimensional reinforcement of the conglomerate is required. It is particularly indicated in structural applications and in severe operating conditions (after static-structural calculation). The main applications, to name a few, are projected concretes (spritz-beton, shotcrete, shotcrete), mass concrete, base slabs and underpinning, structural slabs, medium and large prefabrication, etc.

ALLOWED SUPPORTS

Concrete - Prefabricated concrete - Floor screed

MODE OF USE

In the case of prefabrication or concrete mixing plants with pre-mixer, Readymesh PS can be added directly into the mixer drum or alternatively on the conveyor belt of the aggregates. Add the product, at the desired dosage, only after you have loaded the aggregates in the mixer. It is also possible to add it directly to the fibres in the mixer truck drum, after the same has been loaded with the other components of the concrete. Mix, with the drum of the mixer truck at full speed, for at least one minute for each m³ of concrete. The dosage, depending on use, is normally included between 1 to 6 kg/m³. The recommended dosage for most structural applications is 3 kg/m³. For information only (to be verified by preliminary tests): > industrial concrete floors: 2.5 - 5 kg / m³; > screeds in wet earth: 1 - 3 kg / m³; > prefabricated elements: 3 - 6 kg / m³. The replacement of the traditional steel reinforcement by the addition of the certified structural fibres Readymesh PS can occur only with the approval of the structural engineer in charge. Do not introduce the fibres in truck mixer until you have loaded at least 40% of the aggregates!


APPLICATION METHODS

To be added to other components - Shotcrete machine


KEY FEATURES

 Density: 0.91 g/cm³

 Nonflammable

 UV-resistant

 Diameter: 0.69 mm

 Unlimited shelf-life

TECHNICAL SPECIFICATIONS

Resistant to chemical agents

Softening point **160 - 170 °C**

Resistant to freezing/thawing cycles in the presence of salts/chlorides

Number of filaments **62.500 nr/kg**

Odorless

Auto-ignition temperature **>400 °C**

Alkali-resistant material

ASTM D 1929
Flash-point **350 °C**

CONSUMPTION

Variable according to the type of work to be carried out (screeds, floors, spritz beton), on average from 1 to 6 kg per cubic metre of cement conglomerate.

STORAGE AND CONSERVATION

Store the product in its original packing, in a fresh and dry environment, avoiding frost and direct sunlight. Protect from humidity.

PHOTO GALLERY



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Total pages of this document: 3

ADDITIONAL CONTENT

Technical characteristics of Azichem Srl Readymesh PS polypropylene fibers:

Fiber model	Readymesh PS-300	Readymesh PS-380	Readymesh PS-480
Fiber length	30 mm	38 mm	48 mm
Effect on the consistency of the concrete (Vebè) 5 kg/m ³	-	-	V3
Young's modulus	6.200 MPa	9.000 MPa	10.357 MPa
Tensile strength	502 MPa	502 MPa	502 MPa
Fracture energy	-	-	970 J
Number of filaments for each kg	95.000	75.000	58.000

Plate test Readymesh PS-480

Legislation reference	EN 1488-5	ASTM C 1550-03
Dosage of fibres	6.0 kg/m ³	6.0 kg/m ³
F max	63.12 kN	31.73 kN
Energy of fracture	970 J	422 J

WARNINGS AND PRECAUTIONS

The general information, along with any instructions and recommendations for use of this product, including in this data sheet and eventually provided verbally or in writing, correspond to the present state of our scientific and practical knowledge. Any technical and performance data reported is the result of laboratory tests conducted in a controlled environment and thus may be subject to modification in relation to the actual conditions of implementation.

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