

# FIBERBETON

## POLYPROPYLENE MONOFILAMENT FIBRES IN WATER-SOLUBLE BAGS



# DRACO

## CONCRETE line

SYNTHETIC FIBRES FOR  
CONCRETE AND CIVIL  
SCREEDS



**FIBERBETON** is a synthetic fibre used for crack control of concrete mixes in the plastic phase and as a secondary reinforcement of concrete. They are recommended for use in prefabricated structures, even those with a thin section, as they are characterised by low surface distortion. **FIBERBETON** water-repellent and alkali-resistant fibres are made of polypropylene with high tenacity and high dimensional stability. They are resistant to abrasion, weathering and chemicals, mould, microorganisms and high temperatures. **FIBERBETON fibres are made of** high molecular weight polypropylene; the special extrusion process by which they are produced guarantees their high resistance to the chemicals contained in hydraulic binders and to the aggressive agents present in industrial atmospheres.

## ADVANTAGES

- ✓ **FIBERBETON** fibres are evenly dispersed in the concrete mass, creating a three-dimensional, homogeneously distributed micro-reinforcement that counteracts plastic shrinkage stresses and the formation of micro-cracks. This is possible as a result of the large specific surface area of the fibres and their high adhesion to hydraulic binders due to the special chemical and physical treatment of the fibres themselves.
- ✓ **FIBERBETON** fibres act as a secondary reinforcement in the cement matrix, increase its resistance to carbonation and thus its durability, and improve its appearance, mechanical properties, resistance to impact, abrasion, freeze-thaw cycles, etc.
- ✓ Shrinkage before setting (plastic phase shrinkage) begins with the setting of the concrete mix, i.e., from the moment the mixing water begins to evaporate. The shrinkage of fresh concrete mixes increases as air dryness and circulation increase. The resulting cracking is most evident in the superficial part of the concrete mix section, while it decreases and, at the very least, disappears at depth.

## APPLICATION

**FIBERBETON** fibres are used to manufacture:

- ✓ Industrial concrete floors, airport floors, car parks, etc
- ✓ Anti-shrinkage reinforcement of civil screeds
- ✓ Concretes subjected to particular mechanical stresses and temperature fluctuations
- ✓ Structures in seismic zones, water tanks, swimming pools
- ✓ Cement mortars for restoration and maintenance, plasters; gunite, spritz beton
- ✓ Lightened concretes (reduction of the flotation effect of lightweight aggregates)
- ✓ Prefabricated elements and perimeter infill panels
- ✓ Concrete blocks, perimeter kerbs, manholes, pipes.



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## PACKAGING AND STORAGE

**FIBERBETON** is supplied in water-soluble bags of 0.90 kg in a box of 28, or 25.2 kg.

### PRODUCT CHARACTERISTICS

COMPOSITION	100% Polypropylene
COLOUR	White
AVAILABLE LENGTHS	12-18 mm
FIBRE DIAMETER	17.5 - 19.8 $\mu\text{m} \pm 3\%$ (2.2 -o 2.8 dtex)
SPECIFIC WEIGHT	0.91 $\text{g}/\text{cm}^3$ approx.
TENSILE STRENGTH	350-450 MPa
MODULUS OF ELASTICITY	$\geq 5$ GPa
DOSAGE	0.9-1.8 $\text{kg}/\text{m}^3$ concrete

#### Legal notes – SLCMP version of 01.03.2017

For the values and technical data in this Data Sheet, Draco Italiana s.p.a. adopts the parameters shown in the Data Sheet with the relative standards of reference.

The Customer is required to verify that this sheet and the values shown are valid for the batch of the product of interest, and are not exceeded as they are replaced by subsequent editions. In the event of any uncertainty, compare the technical data sheet with the version in effect at the time the sales contract was concluded (available from the website [www.draco-edilizia.it](http://www.draco-edilizia.it), and/or our Technical Office). In the event the Customer requests that our personnel provide any additional advice concerning the use of the product, such information, whether in verbal or written form, shall not constitute an additional obligation with respect to the terms of the purchase contract, and shall not, in any way, represent a contractual obligation on our part. Such information is based on our experience and is limited to the current state of practical and/or scientific knowledge; hence, it is not binding either for the customer or for the personnel assigned to apply the product. In particular, the Customer is required to check that our products are suitable for the intended use and application, and shall accept sole responsibility for any choices and decisions made on the basis of such checks.