

Teknofiber

Chopped Polypropylene Fiber for Concrete and Mortars



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Product Description

Fibers made of polypropylene, used to increase durability in concrete, resistant to chemicals and high temperature, having hydrophobic property, compatible with all types of cement, minimizing shrinkage cracks in concrete.

Areas of Usage

- It's used in prefabricated concrete,
- Ready-mixed concrete,
- Ready-mixed plaster, screed and mortars,
- In gunite works,
- In heat resistant plaster plates,
- In engineering structures such as tunnels, highways, dams,
- In site and industrial concrete.

Features and Benefits

- It reduces plastic and shrinkage cracks.
- It increases the resistance to abrasion, fracture and breakage.
- It increases buckling strength and fatigue resistance.
- It minimizes the concrete damages caused by freeze- thaw in the UV open field concrete.
- It reduces rebound rate in shotcrete applications.
- Easy to use, low cost, no additional labor required.
- It has a water-soluble packaging.

Application Instructions

TEKNOFIBER is added in plaster, screed, concrete in production plants or construction sites. If the distance between the ready-mixed concrete production plant and the construction site is more than 1 hour, the product is put in the concrete mixer in the construction site. 1 bag (600 gr / m²) is put into 1 m³ concrete. The mixer is stirred at low speed for at least 5 minutes. The concrete is placed in the mold.

Application Notes / Restrictions

- Sudden water loss may occur after adding TEKNOFIBER into concrete. For this reason, the concrete should be replaced as soon as possible in order not to lose its slump.
- TEKNOFIBER is suitable for use in terrestrial regions where the temperature difference between night and day is very high. However, there is no positive or negative effect on flexural strength, flexibility of concrete.
- It is not used for steel reinforcement. Static calculations should be made of iron reinforcements and joints should be cut.
- There is no positive or negative effect of TEKNOFIBER on compressive strengths of 3, 7 and 28 days.
- Immediately after application, before hardened, the areas of contact with the skin and hands should be cleaned with water. The used equipment should be cleaned as soon as possible. After use, the hardened mortar and concrete can only be cleaned by mechanical methods.

Technical Data

| General Information | |
|------------------------|---|
| Purity | 100% polypropylene |
| Appearance | Natural White |
| Packaging | Teknofiber-F (Fibrize) 900 gr Teknofiber-M (Multifilament) 600 gr |
| Consumption | 1 bag (600 gr/m ²) of product is put into 1 m ³ screed, plaster or concrete. |
| Shelf Life | Minimum 2 years in unopened original packaging. |
| Section | Circular |
| Standard | ASTM-C1 1 16 |
| Fiber Length | 6,12,18,19 mm |
| Tensile Strength | 350 N/mm ² |
| Specific Density | 0,91 kg/lt |
| Softening Point | 140°C |
| Melting Point | 165-170°C |
| Acid Effect | Resistant |
| Oxidation Resistance | Very good |
| Organic Solvent Effect | Resistant |
| Cement Compatibility | Very good |
| Alkali Effect | Resistant A |
| UV Resistance | Yes |
| Abrasion Resistance | Very good |
| Moisture Holding | 0 |

Technical data are approximate values obtained from the laboratory study of Tekno Construction Chemicals for finished products obtained at +20°C air temperature and 50% relative air humidity.

