

# DonFiber PP-F

High-performance fibrillated polypropylene fibers



## DESCRIPTION

DonFiber PP-F is a fibrillated micro fiber reinforcement, manufactured of 100% polypropylene fibers containing no polyamide, nylon or reprocessed olefin materials. It is designed for use with all cementitious mixes.

Multidimensional, efficient distribution due to the fibrillated web structure of DonFiber PP-F that surrounds the aggregate within a concrete mix or cementitious mixes providing post-crack reinforcement, preventing crack formation, and enhancing strength.

## APPLICATIONS

DonFiber PP-F is ideally designed for the following applications:

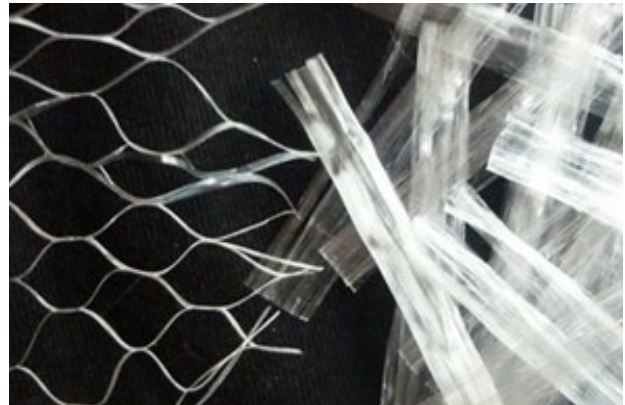
- » Tunnel applications.
- » Shotcrete.
- » Slabs and parking areas.
- » Precast concrete.
- » Industrial and residential floors.
- » Highway, railway, bridge decks.
- » Construction chemicals.

## ADVANTAGES

- » Controls and inhibits crack formulation caused by plastic shrinkage, settlement or other internal stresses in concrete.
- » Reduces shotcrete rebound.
- » Improves fresh mix properties (homogeneity & cohesiveness).
- » Increases concrete durability.
- » Replaces light gauge welded-wire reinforcement (6 x 6 W1.4/W1.4) and traditional shrinkage and temperature reinforcement.
- » Increases Shock, impact and fatigue resistance.
- » Acts as post-crack reinforcement.
- » Easily distributed throughout the cementitious mix.
- » Compatible with all types of cement and concrete admixtures.
- » Rust-free.
- » Reduces bleeding.

## STANDARDS

DonFiber PP-F complies with the requirements of ASTM C1116, Type III and EN 14889 Part II, Type 1B.



## TECHNICAL PROPERTIES:

|                            |                           |
|----------------------------|---------------------------|
| Composition:               | 100% virgin polypropylene |
| Form:                      | Fibrillated micro fiber   |
| Specific gravity:          | 0.91                      |
| Tensile strength:          | 185 - 350 MPa             |
| Modulus of elasticity:     | 2200 - 2960 MPa           |
| Elongation:                | 5.8 - 9.5%                |
| Melting point:             | 160°C                     |
| Absorption:                | Nil/Hydrophobic           |
| Alkali content:            | Alkali-free               |
| Alkali and acid resistant: | Excellent                 |
| Oxidant resistance:        | Excellent                 |
| Biological resistance:     | Excellent                 |

## METHOD OF USE

### MIXING

DonFiber PP-F is added to the mixer before, during or after batching of concrete. Mix for 5 - 6 minutes at high speed after the addition of the final dosage to ensure uniform distribution of fibers.

### DOSAGE

Dosage of DonFiber PP-F will vary depending on the area of application and the required properties of concrete mixes. Typical dosage is between 0.6 - 0.9 kg/m<sup>3</sup> of concrete.



# DonFiber PP-F

## LENGTH

DonFiber PP-F is available in two grades:

- » Single length: 6,12,18 mm.
- » Graded: 6,12,18 mm mixture.

*Other lengths are available upon request.*

## PACKAGING

- » 600 g or 900 g water soluble PE packs.
- » 5 kg plastic bags.

*Other packaging is available upon request.*

## STORAGE

Store in original unopened packaging in dry and shaded areas at temperatures between 5°C and 30°C, protected from moisture and direct sunlight.

If these conditions are exceeded, DCP Technical Department should be contacted for advice.

## CAUTIONS

### HEALTH AND SAFETY

There are no health risks associated with proper use of the product.

For further information refer to the Material Safety Data Sheet.

### FIRE

DonFiber PP-F is combustible and will burn if exposed to flame or other sources of ignition.

## MORE FROM DON CONSTRUCTION PRODUCTS

A wide range of construction chemical products are manufactured by DCP which include:

- » Concrete admixtures.
- » Surface treatments
- » Grouts and anchors.
- » Concrete repair.
- » Flooring systems.
- » Protective coatings.
- » Sealants.
- » Waterproofing.
- » Adhesives.
- » Tile adhesives and grouts.
- » Building products.
- » Structural strengthening.

#### Note:

We endeavour to ensure that any information, advice or recommendation we may give in product literature is accurate and correct. However, because we have no control over where and how products are applied, we cannot accept any liability arising from the use of the products.