PP Fiber

High performance fibrillated polypropylene fibre



Description

PP Fiber is a micro reinforcement, manufactured of 100% polypropylene fibers containing no reprocessed olefin materials designed for use with all cementitious mixes. The inclusion of PP Fiber within a concrete mix or cementitious mixes will control shrinkage cracks and will act as an alternative to traditional crack control steel mesh.

Applications

PP Fiber is ideally designed for use in the following applications:

- ▲ Slab on grade.
- ▲ Stamped concrete.
- ▲ Pre-cast concrete.
- ▲ Water tanks.
- ▲ Pavements.
- ▲ Shotcrete.
- ▲ Renders.
- Composite decks.

Advantages

- ▲ Controls and inhabits crack formation in concrete.
- ▲ Reduce plastic shrinkage and settlement cracking.
- ▲ Available in variable lengths, 19 and 12 mm for concrete and stamped concrete. 3 and 6 mm for plasters and mortars.
- ▲ Compatible with all types of cement and concrete admixtures.
- ▲ Rust free.

Standards

PP Fiber complies with the requirements of ASTM C1116:1997, Type 3 and EN 14889-2.

Method of Use

Mixing

PP Fiber is added to the mixer before, during or after batching of concrete. Mixing speed and time should be as per ASTM C94.

Technical Properties:

Composition: 100% virgin Polypropylene

Appearance: Fibrillated mini bundle

Specific gravity: 0.90 kg/ltr

Tensile strength: 137 - 689 MPa

Young's modulus: 3.4 - 4.8 GPa

Toughness: 8.82 GPa

Elongation: 25 - 40%

Softening point: 150°C

Melting point: 160°C

Ignition point: 580°C

Chloride content: Nil

Sulphate content: Nil

Alkali content: Nil

Packaging

40 mm fiber length: 0.6 kg/bag. 19 mm fiber length: 0.9 kg/bag. 12 mm fiber length: 0.6 kg/bag. 12 mm fiber length: 0.9 kg/bag. 3 and 6 mm fiber length: 0.6 kg/bag.

Dosage

Industrial flooring: 0.6 kg/m³ for 40 mm fiber length. Concrete floors: 0.6 kg/m³ of 19 mm or 12 mm fiber length.

Stamped concrete: 0.6 kg/m³ of 12 mm fiber length. Mortars and plaster: 0.6 kg/m³ of 3 mm fiber length.

Storage

Store under cover away from heat sources.

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

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Cautions

Health and Safety

There are no health hazards associated with PP Fiber in normal use.

Fire

PP Fiber 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.