# DonFiber PP Ultra



Ultra-fine, high performance monofilament polypropylene fibers

# **DESCRIPTION**

DonFiber PP Ultra is an ultra-fine denier, monofilament 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.

The inclusion of DonFiber PP Ultra within a concrete mix or cementitious mixes will reduce and control plastic shrinkage cracks and early age cracks.

# **APPLICATIONS**

DonFiber PP Ultra is ideally designed to decrease the plastic shrinkage cracking and plastic settlement cracking in the following applications:

- » Slab on grade.
- » Elevated slabs.
- » Parking areas.
- » Stamped concrete.
- » Precast concrete.
- Water tanks.
- » Pavements.
- » Shotcrete.
- » Renders.
- » Composite decks.

# **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.
- >> Easily distributed throughout the cementitious mix.
- » Compatible with all types of cement and concrete admixtures.
- » Rust-free.
- » Reduces bleeding.
- » Higher fiber count per Kg than standard monofilament fiber resulting in lower dosages.
- » Rust-free.

# **STANDARDS**

DonFiber PP Ultra complies with the requirements of ASTM C1116, Type III and EN 14889 Part II, Type 1A.



# **TECHNICAL PROPERTIES:**

Composition: 100% virgin polypropylene

Form: Monofilament micro fiber

Specific gravity: 0.91

Tensile strength: 460 - 545 MPa

Modulus of elasticity: 4040 - 5670 MPa

Elongation: 20 - 25%

Melting point: 160°C

Absorption: Nil/ Hydrophobic

Chloride content: Chloride-free

Sulphate content: Sulfate-free

Alkali content: Alkali-free

Alkali and acid

resistant:

Excellent

Oxidant resistance: Excellent

Biological resistance: Excellent



# DonFiber PP Ultra

### **METHOD OF USE**

#### **MIXING**

DonFiber PP Ultra 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 Ultra will vary depending on the area of application and the required properties of concrete mixes. Typical dosage is between 0.3 - 0.9 kg/m³ of concrete.

#### **PACKAGING**

DonFiber PP Ultra is available in two grades:

» Single length: 6,12,18 mm.

» Graded: 6,12,18 mm mixture.

#### Filled in:

- » 300, 600, 900 gram 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 tempratures between 5°C and 30°C, protected from moisture and direct sunlight.

If these conditions are exceeded, contact DCP Technical Department 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 Ultra 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.