

# Wiking® Standard Fine

Wiking® Standard Fine is a multifilament fibre that has been extruded into very fine "fibrils" that are very efficient in the prevention of crack formation in the actual drying/hardening phase of concrete.

The fibre that is special development in polypropylene as an improvement to all forms of cement materials is applicable where an attempt is made to prevent crack formation caused by plastic shrinkage.

#### Advantages and properties:

- Alternative to crack controlling mesh reinforcement
- Increases impact resistance
- Increases inflexional strength
- Increases ductility
- Fire-retardant ability in tunnel construction

## General fields of application:

- Dry Mortars
- Indoor floor units
- Ground decks
- Elements
- Pavements and roads
- Coast protection
- Windmill pedestals and similar structures

#### **Specifications:**

Wiking® Standard Fine is physically resistant to all chemicals in the con-

#### Specifications – Wiking® Standard Fine

 Material:
 polypropylene C3 H6

 Fibre length:
 3, 6, 12, 18, 24 and 36 mm

 Density:
 ≤ 0.91 g/ cm³

 Design:
 monofilament

 Design:
 monofilament

 Diameter:
 50 μm

 Tensile strength:
 361 MPa

 Resistance against alkalis:
 high

 Water absorption:
 zero

 Softening temperature:
 approx.160°C

Softening temperature: approx. 160°C

Dosage: 1-3 kg/m³ concrete

#### 2024.10.29







crete, and the look and durability of the concrete do not deteriorate. Concrete is liable to develop cracks in the early drying phases, as the shrinking tension is then at its highest. In this phase Wiking® Standard Fine prevents the formation of cracks extremely effectively as the fibre has a high dispersing ability in matrix, and the unique fineness of the fibre causes such a high fibre frequency that these catch and counteract the formation of cracks as soon as it is occurring.

The fibre structure and specific fibre surface ensures that maximum tensile strength is effectively transferred to the concrete. This makes the early shrinkage tension distribute evenly in the concrete, and thus the formation of cracks and long-term weaknesses in the concrete will be avoided. The Wiking® Fibrilated ensures that the matrix will mature to developing the full strength potential.

## Properties of Wiking® standard fine:

The characteristic properties of Wiking® Fibrilated can be briefly described as including:

- High specific surface area
- Good distribution property
- High strength
- Increased adhesive ability in cement materials
- The good properties of polypropylene.

#### **Delivery program**

Wiking® standard fine, is available in 480 kg pallets, 24 x 20 kg carton, carton 20 x 1 kg packages. Minimum quantity is to be determined in a common agreement.

## Properties of polypropylene fibres:

Polypropylene has the following characteristics:

- Very low density (0.91g/cu cm)
- Resistant to acids and bases.

#### **Surface treatment:**

The surface of the fibres has been specially treated with a view of high dispersing and adhesive abilities in the concrete. At the same time this treatment reduces the air-intake in the concrete to about 1% and thus creates low porosity in the concrete, which increases its strength.

#### **Extent of Guarantee**

Wiking® standard fine, complies with EN-14.889-2, fibre class 1a, system 1 and is produced in a facility that is certified with ISO 9001-2004. Danish Fibres does not have control over the installation of their products and their processing, and therefore cannot take responsibility for the final products.

#### **Health and safety:**

Please read the specific safety data sheet or contact the Danish Fibres technicians.

#### **Technical consultancy:**

The Danish Fibres technical department is at your disposal and can advise you on the correct use of our products.

Danish Fibres documents, including all drawings, proposed procedures and specifications are exclusively general information. Details can be changed without prior warning. Practical application of the information requires independent, professional consultancy and verification of its precision, suitability and usability. The user alone shall be liable for the actual application of the products, including the choice of product, the use, the design, the production or the test of the materials in which our products are used.

Danish Fibres shall not be held liable for the end products or for the use of our products.

Danish Fibres shall in no case be liable for any damage, including direct or indirect losses that might occur as a consequence of wrong application of the information. See also the general sales and delivery terms from Danish Fibres.



Snedkervej 3 · DK-6800 Varde · Denmark P. +45 88 38 98 90 · F. +45 88 38 98 99 info@danishfibres.dk · www.danishfibres.dk