

# Technical Fibres 18 micron

## Product specification

Wiking® Technical Fibres are all-round fibres developed for use in needle felts, filters and other technical applications. They are made of polypropylene and have a number of unique properties, which explain their growing popularity in technical end uses.

## Density

Wiking® Technical Fibres are the lightest of all fibres and can therefore produce equivalent products (with same area coverage) using less weight of fibres.

### Comparison of fibre densities (g/cm<sup>3</sup>)

Polypropylene	0.91
Polyester	1.38
Amide	1.44
Polyacrylonitrile	1.18
Viscose/Rayon	1.51
Wool	1.32
Cotton	1.54

## Thermal properties

Wiking® Technical Fibres have very low thermal conductivity, which makes them excellent insulators against heat, sound and electrostatic charge.

### Specifications - Wiking® Technical Fibres 18 micron

Tensile strength	2.5-8.0 cN/dtex
Elongation	30-180%
Crimp/10 cm	50-70 curves
<b>If textures:</b>	
Shrinkage - At 130°C/10 minutes	<3-4%
Max. Fixation Temperature	130°C
Softening Temperature	150°C

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Softening point	140-150°C
Melting range	165° C<3%
Thermal shrinkage - (hot air 10 min/130 °C)	<3%
Processing- temperature	max. 130°C
<b>Absorption</b>	
Wiking® Technical Fibres do not absorb water	
Moisture absorption - at 20°C/65% R.H.	0,05%
Water absorption	<0,1%

This is the lowest moisture absorption of all fibres and therefore quick drying is guaranteed.

At the same time, Wiking® Technical Fibres in Tow have the same tensile strength, whether wet or dry, unlike most other fibres.

Comparison of wet tensile strength in % of original strength:

Polypropylene	100%
Polyester	100%
Polyamide	80-90%
Polyacrylonitrile	85-95%
Viscose/Rayon	50-60%
Wool	80-90%
Cotton	100-110%

## Chemical and biological resistance

All Wiking® Technical Fibres in Tow are highly resistant to both acids and alkalis and to more organic chemicals.

Moreover, they do not rot and are not attacked by insects, micro organisms or moulds.

## Light and heat resistance

Wiking® Technical Fibres in Tow can be specially treated with UV-stabilizers during manufacturing to obtain resistance against the effect of UV in sunlight.

## Electrostatic behaviour

Wiking® Technical Fibres in Tow have very little tendency to acquire static charge. The antistatic property of these fibres is even superior to that of polyamide and wool.

## Product range

Wiking® technical fibers are supplied in tows or bales in textured form.

## Dimensions

18 micron

## Cut lengths

2-150 mm - cut lengths by appointment

## Shortcut

2, 3, 4, 6, 12, 18, 19, 24 mm

## In cable

By appointment.

Tow can be split and delivered by appointment.

All tows can be delivered in boxes by appointment.

All bales will be delivered with approx. 200 - 250 kg, depending on wish from customer.

## Guarantee references

Wiking® Technical Fibres 18 micron, complies with EN-14.889-2, fibre class 1a, system 1 and is produced in an installation 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 sheets or contact the technicians at Danish Fibres.

## Technical consultation

The technical department at Danish Fibres is available to you and can give advice about the correct use of our products.