

Technical PP Fibres

Product Specification

Technical PP Fibres are fibres developed for use in papermaking, battery plates and many 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

Technical PP 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/cm³)

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

Thermal Properties

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

Softening point	140-150°C
Melting range	165° C<3%
Thermal shrinkage - (hot air 10 min/130 °C)	<3%
Processing-temperature	max. 130°C

Absorption

Technical PP Fibres do not absorb water:

Moisture absorption - at 20°C/65% R.H.	0,05%
Water absorption	<0,1%

Technical Specifications

Technical PP Fibres in Tow have the following technical properties:

Tensile strength	2.5-3.8 cN/dtex
Elongation	30-180%
Crimp/10 cm	50-70 curves
If textures	
Shrinkage - At 130°C/10 minutes	<3-4%
Max. Fixation Temperature	130°C
Softening Temperature	150°C

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

At the same time, Technical PP 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 & Biological Resistance

All Danish Fiber Technical PP 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 & Heat Resistance

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

Electrostatic Behaviour

Danish Fiber Technical PP 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

Danish Fiber Technical PP Fibres in Tow are available within the following ranges:

Dimensions:

1.7-110 dtex

Cut lengths:

3-150 mm

Shortcut:

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

In cable:

2.2 dtex: Kabel of 600,000 dtex
2.8 dtex: Kabel of 800,000 dtex
3.3 dtex: Kabel of 900,000 dtex
6.7 dtex: Kabel of 985,000 dtex
7.2 dtex: Kabel of 1036800 dtex
17 dtex: Kabel of 1199520 dtex

NB: The cable can be split and delivered as: 1/6, 2/6, 3/6, 4/6, 5/6 and 6/6.

All cable will be delivered in boxes each app. 125 – 175 kg. 4 boxes on each pallets (800x1200)