

TECAFIL PEEK EV natural - Filament

Chemical Designation

PEEK (Polyetheretherketone)

Colour

beige opaque

Density

1.3 g/cm³

Main features

→ Standard spool body: OD Ø 200mm, width 55mm, Take up Ø52mm

<i>Mechanical properties</i>	<i>parameter</i>	<i>value</i>	<i>unit</i>	<i>norm</i>	<i>comment</i>
Tensile strength	50 mm/min	96	MPa	DIN EN ISO 527-2	
Modulus of elasticity (tensile test)	1 mm/min	3500	MPa	DIN EN ISO 527-1	
Elongation at break (tensile test)	50 mm/min	30	%	DIN EN ISO 527-2	
Impact strength (Charpy)		n.B.	kJ/m ²	DIN EN ISO 179-1eU	
<i>Thermal properties</i>	<i>parameter</i>	<i>value</i>	<i>unit</i>	<i>norm</i>	<i>comment</i>
Glass transition temperature		143	°C	DIN 53765	
Melting temperature		343	°C	DIN 53765	
Service temperature	long term	260	°C	-	
Service temperature	short term	300	°C	-	
<i>Processing parameter</i>	<i>parameter</i>	<i>value</i>	<i>unit</i>	<i>norm</i>	<i>comment</i>
Cylinder/processing temperature		360 - 400	°C	-	
Mould temperature		160 - 200	°C	-	
Material temperature		370 - 380	°C	-	
<i>Predrying</i>	<i>parameter</i>	<i>value</i>	<i>unit</i>	<i>norm</i>	<i>comment</i>
Permissible residual moisture content		< 0,02	%	-	
Drying temperature		140 - 160	°C	-	
Drying time		4 - 6	h	-	

→ To achieve optimum mechanical properties, it is recommended to pre-dry the material with the above mentioned parameters.

→ The filament should preferably be stored in dry, normal temperature rooms and protected from direct sunlight.

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