

TECAFIL PEI 9085 natural - Filament

Chemical Designation

PEI (Polyetherimide)

Colour

natural

Density

1.34 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 at yield	5mm/min	88	MPa	DIN EN ISO 527-1	
Tensile strength at break	5mm/min	71	MPa	DIN EN ISO 527-1	
Elongation at yield	5mm/min	7	%	DIN EN ISO 527-1	
Elongation at break	5mm/min	50	%	DIN EN ISO 527-1	
Notched impact strength (Izod)	notched 80*10*4 +23°C	13	kJ/m ²	DIN EN ISO 179-1eA	
<i>Thermal properties</i>	<i>parameter</i>	<i>value</i>	<i>unit</i>	<i>norm</i>	<i>comment</i>
Glass transition temperature		216	°C	DIN EN ISO 11357	
Service temperature	short term	200	°C	-	
Service temperature	long term	170	°C	-	
<i>Processing parameter</i>	<i>parameter</i>	<i>value</i>	<i>unit</i>	<i>norm</i>	<i>comment</i>
Material temperature		330 - 350	°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		135	°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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