

### Chemical Designation

PEEK (Polyetheretherketone)

### Colour

natural

### Density

1.9 g/cm<sup>3</sup>

### Fillers

glass fibres

### Main features

- electrically insulating
- inherent flame resistance
- very good mechanical strength

### Target Industries

- automotive industry
- aircraft and aerospace technology
- mechanical engineering
- oil and gas industry
- safety engineering
- sporting goods

The material is in the phase of further development. The characteristic values of this product may change.

<i>General material information</i>	<i>parameter</i>	<i>value</i>	<i>unit</i>	<i>norm</i>	<i>comment</i>
Fibre type		E glass		-	
Fibre architecture		US 7781		-	
Fibre areal weight		296	g/m <sup>2</sup>	-	
Fibre volume content		50	%	-	
Resin weight content		33.9	%	-	
Areal weight finished product		455	g/m <sup>2</sup>	-	
Material widths		1270	mm	-	
ply thickness (consolidated)		0.24	mm	-	
<i>Mechanical properties</i>	<i>parameter</i>	<i>value</i>	<i>unit</i>	<i>norm</i>	<i>comment</i>
Tensile strength		450	MPa	ISO 527-4	1)
Modulus of elasticity (tensile test)		24000	MPa	ISO 527-4	2)
Flexural strength		445	MPa	ISO 14125	3)
Modulus of elasticity (flexural test)		22000	MPa	ISO 14125	4)
<i>Thermal properties</i>	<i>parameter</i>	<i>value</i>	<i>unit</i>	<i>norm</i>	<i>comment</i>
Glass transition temperature		143	°C	-	(1) approximate value
Melting temperature		343	°C	-	
Service temperature	short term	300	°C	-	
Service temperature	long term	260	°C	-	
Thermal expansion (CLTE)	in 0° and 90° direction	10	10 <sup>-6</sup> K <sup>-1</sup>	-	1)
<i>Predrying</i>	<i>parameter</i>	<i>value</i>	<i>unit</i>	<i>norm</i>	<i>comment</i>
Drying temperature		150	°C	-	
Drying time		4-6	h	-	

