

### Chemical Designation

PEI (Polyetherimide)

### Colour

natural

### Density

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

### Fillers

glass fibres

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

### Main features

- electrically insulating
- inherent flame resistance
- very good mechanical strength
- continuous service temperature up to 150 °C

### Target Industries

- automotive industry
- mechanical engineering
- oil and gas industry
- safety engineering
- sporting goods

General material information		parameter	value	unit	norm	comment
Fibre type			E glass		-	
Fibre architecture			US 7781		-	
Fibre areal weight			296	g/m <sup>2</sup>	-	
Fibre volume content			50	%	-	
Resin weight content			33.7	%	-	
Areal weight finished product			446	g/m <sup>2</sup>	-	
Material widths			1270	mm	-	
ply thickness (consolidated)			0.24	mm	-	
Mechanical properties		parameter	value	unit	norm	comment
Tensile strength			450	MPa	ISO 527-4	1)
Modulus of elasticity (tensile test)			24000	MPa	ISO 527-4	2)
Flexural strength			570	MPa	ISO 14125	3)
Modulus of elasticity (flexural test)			26000	MPa	ISO 14125	4)
Compression strength			670	MPa	ISO 14126	5)
Compression modulus			27000	MPa	ISO 14126	6)
Thermal properties		parameter	value	unit	norm	comment
Glass transition temperature			217	°C	-	(1) approximate value
Service temperature		short term	200	°C	-	
Service temperature		long term	180	°C	-	
Thermal expansion (CLTE)		in 0° and 90° direction	10	10 <sup>-6</sup> K <sup>-1</sup>	-	1)
Predrying		parameter	value	unit	norm	comment
Drying temperature			150	°C	-	
Drying time			4-6	h	-	

