Technical Specification Sheets

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Chemical Designation
PEI (Polyetherimide)

Colour
natural

Density
1.9 g/cm^3

Fillers
glass fibres

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

Target Industries
- automotive industry
- 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.

General material information	*parameter*	*value*	*unit*	*norm*	*comment*
Fibre type		E glass		-	
Fibre architecture		US 7781		-	
Fibre areal weight		296	g/m²	-	
Fibre volume content		50	%	-	
Resin weight content		33.7	%	-	
Areal weight finished product		446	g/m²	-	
Material widths		625x525	mm	others on request	
thickness		1-95	mm	-	
Fibre orientation		0-90°		others on request	

Mechanical properties	*parameter*	*value*	*unit*	*norm*	*comment*
Tensile strength		450	MPa	ISO 527-4	
Modulus of elasticity (tensile test)		24000	MPa	ISO 527-4	
Flexural strength		570	MPa	ISO 14125	
Modulus of elasticity (flexural test)		26000	MPa	ISO 14125	
Compression strength		670	MPa	ISO 14126	
Compression modulus		27000	MPa	ISO 14126	

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^{-6} K^{-1}	- 1)	

Predrying	*parameter*	*value*	*unit*	*norm*	*comment*
Drying temperature		150	°C	-	
Drying time		4-6	h	-	