

TECATEC PPS GW50 PL V01 natural - Composite Materials

Chemical Designation

PPS (Polyphenylsulfide)

Colour

natural

Density

1.9 g/cm³

Fillers

glass fibres

Main features

- excellent chemical resistance
- 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			style 7628		-	
Fibre areal weight			203	g/m ²	-	
Fibre volume content			50	%	-	
Resin weight content			34.9	%	-	
Areal weight finished product			312	g/m ²	-	
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			375	MPa	ISO 527-4	
Modulus of elasticity (tensile test)			23000	MPa	ISO 527-4	
Flexural strength			500	MPa	ISO 14125	
Modulus of elasticity (flexural test)			21000	MPa	ISO 14125	
Compression strength			400	MPa	ISO 14126	
Compression modulus			26000	MPa	ISO 14126	
Interplanar shear strength			88	MPa	ISO 14129	
Thermal properties		parameter	value	unit	norm	comment
Glass transition temperature			90	°C	-	(1) approximate value
Melting temperature			285	°C	-	
Service temperature		short term	260	°C	-	
Service temperature		long term	230	°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			2-3	h	-	

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