

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	
in-plane 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	-	

