

TECATEC PPS CF50 X193 CP/IP/OS V01 natural - Composite Materials

Chemical Designation

PPS (Polyphenylensulfide)

Colour

natural

Density

1.52 g/cm³

Fillers

carbon fibres

Main features

- excellent chemical resistance
- inherent flame resistance
- excellent mechanical properties
- continuous service temperature up to 150 °C

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			Carbon HT 3k		-	
Fibre architecture			BIMAX +/- 45°		-	
Fibre areal weight			193	g/m ²	-	
Fibre volume content			50	%	-	
Resin weight content			42.7	%	-	
Areal weight finished product			337	g/m ²	-	
Material widths	others on request		1000	mm	-	
ply thickness (consolidated)			0.21	mm	-	
Mechanical properties		parameter	value	unit	norm	comment
Tensile strength			130	MPa	ISO 527-4	
Modulus of elasticity (tensile test)			4400	MPa	ISO 527-4	
Interlaminar shear strength			60	MPa	ISO 14130	
Thermal properties		parameter	value	unit	norm	comment
Glass transition temperature			90	°C	-	
Melting temperature			285	°C	-	
Service temperature	short term		260	°C	-	
Service temperature	long term		230	°C	-	
Predrying		parameter	value	unit	norm	comment
Drying temperature			150	°C	-	
Drying time			2-3	h	-	

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