

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		1000	mm	-	
ply thickness (consolidated)		0.21	mm	-	
Mechanical properties	parameter	value	unit	norm	comment
Tensile strength		130	MPa	ISO 527-4	1) (1) measured on pressed plate
Modulus of elasticity (tensile test)		4400	MPa	ISO 527-4	2) (2) measured on pressed plate
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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