

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

Chemical Designation

PPS (Polyphenylsulfide)

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	-	

Nothing contained in this Technical Datasheet shall be interpreted as any express warranty or guarantee. We are neither liable for any values nor content of this datasheet. This exclusion of liability does not apply to claims for damages based on intent, gross negligence or culpable breach of material contractual obligations (cardinal obligations), nor in the case of injury to life, body or health and in the case of product liability as provided by law. Nothing contained herein shall be construed to indicate the non-existence of any relevant patents or to constitute a permission, encouragement or recommendation to practice any development covered by any patents, without permission of the owner of this patent. Data sheet parameters are subject to regular review, the current versions can be found at www.ensingerplastics.com