

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.

<i>General material information</i>	<i>parameter</i>	<i>value</i>	<i>unit</i>	<i>norm</i>	<i>comment</i>
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	-	
<i>Mechanical properties</i>	<i>parameter</i>	<i>value</i>	<i>unit</i>	<i>norm</i>	<i>comment</i>
Tensile strength		130	MPa	ISO 527-4	1) (1) measured on pressed plate 2) (2) measured on pressed plate
Modulus of elasticity (tensile test)		4400	MPa	ISO 527-4	2)
<i>Thermal properties</i>	<i>parameter</i>	<i>value</i>	<i>unit</i>	<i>norm</i>	<i>comment</i>
Glass transition temperature		90	°C	-	
Melting temperature		285	°C	-	
Service temperature	short term	260	°C	-	
Service temperature	long term	230	°C	-	
<i>Predrying</i>	<i>parameter</i>	<i>value</i>	<i>unit</i>	<i>norm</i>	<i>comment</i>
Drying temperature		150	°C	-	
Drying time		2-3	h	-	

