

Chemical Designation

PP (Polypropylene)

Colour

natural

Density

1.7 g/cm³

Fillers

glass fibres

The material is in the phase of further development. The characteristic values of this product may change.

Main features

- very good abrasion resistance
- very good chemical resistance
- good damping
- electrically insulating
- good mechanical properties

Target Industries

- automotive industry
- mechanical engineering
- oil and gas industry
- safety engineering
- sporting goods

General material information		parameter	value	unit	norm	comment
Fibre type			E glass		-	
Fibre architecture			Twill 2/2		-	
Fibre areal weight			600	g/m ²	-	
Fibre volume content			45	%	-	
Resin weight content			35.4	%	-	
Areal weight finished product			887	g/m ²	-	
Material widths			1270	mm	-	
ply thickness (consolidated)			0.51	mm	-	
Mechanical properties		parameter	value	unit	norm	comment
Tensile strength			400	MPa	ISO 527-4	1)
Modulus of elasticity (tensile test)			20000	MPa	ISO 527-4	2)
Flexural strength			280	MPa	ISO 14125	3)
Modulus of elasticity (flexural test)			19000	MPa	ISO 14125	4)
Thermal properties		parameter	value	unit	norm	comment
Glass transition temperature			-10	°C	DIN EN ISO 11357	(1) approximate value
Melting temperature			161	°C	DIN EN ISO 11357	
Service temperature		short term	140	°C	-	
Service temperature		long term	100	°C	-	
Thermal expansion (CLTE)		in 0° and 90° direction	10	10 ⁻⁶ K ⁻¹	-	1)
Predrying		parameter	value	unit	norm	comment
Drying temperature			80	°C	-	
Drying time			6-8	h	-	

