

### Chemical Designation

PC (Polycarbonate)

### Colour

natural

### Density

1.75 g/cm<sup>3</sup>

### Fillers

flame retardant (halogen free), glass fibres

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

### Main features

- very good dimensional stability
- flame retardant as per FAR 25.853
- very good mechanical strength
- low moisture absorption

### Target Industries

- automotive industry
- aircraft and aerospace interiors
- mechanical engineering
- sporting goods

General material information		parameter	value	unit	norm	comment
Fibre type			E-Glass		-	
Fibre architecture			US 7781		-	
Fibre areal weight			296	g/m <sup>2</sup>	-	
Fibre volume content			50	%	-	
Resin weight content			31.9	%	-	
Areal weight finished product			435	g/m <sup>2</sup>	-	
Material widths			1270	mm	-	
ply thickness (consolidated)			0.24	mm	-	
Mechanical properties		parameter	value	unit	norm	comment
Tensile strength			450	MPa	ISO 527-4	1) (1) measured on pressed plate
Modulus of elasticity (tensile test)			24000	MPa	ISO 527-4	2) (2) measured on pressed plate 3) (3) measured on pressed plate 4) (4) measured on pressed plate
Flexural strength			660	MPa	ISO 14125	3)
Modulus of elasticity (flexural test)			22000	MPa	ISO 14125	4)
Thermal properties		parameter	value	unit	norm	comment
Glass transition temperature			130	°C	DIN EN ISO 11357	(1) approximate value
Service temperature		short term	140	°C	-	
Service temperature		long term	120	°C	-	
Thermal expansion (CLTE)		in 0° and 90° direction	5	10 <sup>-6</sup> K <sup>-1</sup>	-	1)
Predrying		parameter	value	unit	norm	comment
Drying temperature			100	°C	-	
Drying time			3	h	-	

