

TECACOMP PC GF30 natural 1015015 - Compounds

Chemical Designation

PC (Polycarbonate)

Colour

natural

Density

1.43 g/cm³

Fillers

glass fibres

<i>Mechanical properties</i>	<i>parameter</i>	<i>value</i>	<i>unit</i>	<i>norm</i>	<i>comment</i>
Tensile strength	50 mm/min	142	MPa	DIN EN ISO 527-1	
Modulus of elasticity (tensile test)	50 mm/min	8500	MPa	DIN EN ISO 527-1	
Elongation at break (tensile test)	50 mm/min	4	%	DIN EN ISO 527-1	
Impact strength (Charpy)	7,5 J	70	kJ/m ²	DIN EN ISO 179-1eU	
<i>Thermal properties</i>	<i>parameter</i>	<i>value</i>	<i>unit</i>	<i>norm</i>	<i>comment</i>
Glass transition temperature		148	°C	-	
Service temperature	short term	140	°C	-	
Service temperature	long term	120	°C	-	
<i>Other properties</i>	<i>parameter</i>	<i>value</i>	<i>unit</i>	<i>norm</i>	<i>comment</i>
Melt flow index (MFI)	300 °C / 1,20 kg	5,0	g/10 min	DIN EN ISO 1133	
Bulk density		0,65	g/cm ³	EN ISO 60	
<i>Processing parameter</i>	<i>parameter</i>	<i>value</i>	<i>unit</i>	<i>norm</i>	<i>comment</i>
Cylinder/processing temperature		280 - 320	°C	-	
Mould temperature		80 - 110	°C	-	
Material temperature		290 - 310	°C	-	

→ This material can be processed as a thermoplastic taking the normal technical provisions into account. The above mentioned information refers exclusively to the injection moulding process.

→ Processing should be carried out as gently as possible, in order to maintain the maximum fibre length in the component. Back pressure and injection rate should be adjusted to the component geometry accordingly. The optimum processing temperature depends upon the respective geometry of the moulded part and can be different from machine to machine.

<i>Predrying</i>	<i>parameter</i>	<i>value</i>	<i>unit</i>	<i>norm</i>	<i>comment</i>
Permissible residual moisture content		< 0,1	%	-	
Drying temperature		120	°C	-	
Drying time		2 - 6	h	-	

→ To achieve optimum mechanical properties, it is recommended to pre-dry the material with the above mentioned parameters.

→ Information on storage and shelf life: The granules must be stored in dry, normally tempered rooms and in closed containers. For moisture-sensitive materials, the granules must be sealed airtight. Protection against direct sunlight must be guaranteed. The granules are usually subject to the requirements of no shelf life limitation. Shelf Life may be limited by some additives.

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