



TECHNICAL DATA SHEET

Witcom PES/6C/3L1, based on Polyethersulfone (PES)

30% carbon fibres, 15% PTFE, conductive

Properties	Test method	Unit	PES/6C/3L1
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Physical properties

Specific gravity	ISO 1183	g/cm ³	1,57
Water absorption at saturation, 23 °C	ISO 62	%	1,4
Humidity absorption, 23 °C/50 % RH	ISO 62	%	0,5
Mould shrinkage (flow direction, 3 mm)	ISO 2577	%	0,1 - 0,3

Mechanical properties

Tensile strength (max.)	ISO 527	MPa	150
Elongation at break	ISO 527	%	1 - 2
Flexural strength	ISO 178	MPa	220
Flexural modulus	ISO 178	GPa	14,5
IZOD impact strength, notched	ISO 180/1eA	kJ/m ²	6,5
IZOD impact strength, unnotched	ISO 180/1eU	kJ/m ²	20

Thermal properties

Heat distortion temperature (1,81 MPa)	ISO 75	°C	210
Relative temperature index, 3 mm with impact	UL 746B	°C	180
Coefficient of linear thermal expansion	ISO 11359	K·10 ⁻⁵	1,2

Flammability

Burning behaviour	ISO 1210	-	V0 @ 3,0 mm
UL recognition	UL94	-	-

Electrical properties

Surface resistivity	ASTM D257	Ω/sq	10 ¹ - 10 ³
Volume resistivity	ASTM D257	Ω·cm	10 ¹ - 10 ³
Comparative tracking index	IEC 60112	V	-
Glow wire rating, 1,6 mm	IEC 695-2-1	°C	960

Revision date: 14-09-2007

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