



TECHNICAL DATA SHEET

Witcom PA6/3C-HS, based on Polyamide 6 (PA6)

15% carbon fibres, heat stabilised, conductive

Properties	Test method	Unit	PA6/3C-HS
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Physical properties

Specific gravity	ISO 1183	g/cm ³	1,20
Water absorption at saturation, 23 °C	ISO 62	%	8,0
Humidity absorption, 23 °C/50 % RH	ISO 62	%	2,5
Mould shrinkage (flow direction, 3 mm)	ISO 2577	%	0,2 - 0,4

Mechanical properties

Tensile strength (max.)	ISO 527	MPa	180
Elongation at break	ISO 527	%	2 - 3
Flexural strength	ISO 178	MPa	250
Flexural modulus	ISO 178	GPa	9,5
IZOD impact strength, notched	ISO 180/1eA	kJ/m ²	6,0
IZOD impact strength, unnotched	ISO 180/1eU	kJ/m ²	55

Thermal properties

Heat distortion temperature (1,81 MPa)	ISO 75	°C	195
Relative temperature index, 3 mm with impact	UL 746B	°C	95
Coefficient of linear thermal expansion	ISO 11359	K-1·10 ⁻⁵	2,9

Flammability

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

Electrical properties

Surface resistivity	ASTM D257	Ω/sq	10 ³ - 10 ⁵
Volume resistivity	ASTM D257	Ω·cm	10 ⁴ - 10 ⁶
Comparative tracking index	IEC 60112	V	-
Glow wire rating, 1,6 mm	IEC 695-2-1	°C	750

Revision date: 14-09-2009

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