TECHNICAL DATA SHEET

Witcom PA66/6LC-EM-HS, based on Polyamide 66 (PA66)

30% long carbon fibres, easy moulding, heat stabilised, conductive

Properties	Test methods	Units	PA66/6LC-EM-HS
Physical properties			
Specific gravity	ISO 1183	g/cm^3	1,28
Water absorption at saturation, 23 °C	ISO 62	%	5,8
Humidity absorption, 23 °C/50 % r.h.	ISO 62	%	1,7
Mould shrinkage (flow direction, 3 mm)	ISO 2577	%	0,2 - 0,3
Mechanical properties			
Tensile strength (max.)	ISO 527	MPa	305
Elongation at break	ISO 527	%	2
Tensile modulus	ISO 527	GPa	24,0
Flexural strength	ISO 178	MPa	420
Flexural modulus	ISO 178	GPa	22,5
Charpy impact strength, notched	ISO 179/1eA	kJ/m^2	18,0
Charpy impact strength, unnotched	ISO 179/1eU	kJ/m^2	55
Thermal properties			
Heat distortion temperature (1,81 MPa)	ISO 75	°C	250
Relative temperature index, 3 mm, with impact	UL 746B	°C	-
Coefficient of linear thermal expansion	ISO 11359	$K\text{-}1 \cdot 10^{-5}$	-
Flammability			
Burning behaviour	ISO 1210	-	HB @ 3,0 mm
UL recognition	UL94	-	-
Electrical properties			
Surface resistivity	ASTM D257	Ω/sq	10^2
Comparative tracking index	IEC 60112	V	-
Glow wire rating, 1,6 mm	IEC 695-2-1	°C	-

Processing conditions (injection moulding)

Drying conditions (dehumidifying drier)	:	4 Hours @ 110 °C
Maximum allowable moisture content	:	0,10 %
Melt temperature	:	280 - 300 °C
Mould temperature	:	80 - 170 °C (> 150 °C when optimum surface quality is desired!)
Screw speed	:	0,1 - 0,2 m/s
Back pressure	:	0 - 1,0 MPa
Injection pressure	:	Keep to a minimum
Injection speed	:	Fast ram speed
Hold pressure	:	Keep to a minimum

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