



PRELIMINARY DATA SHEET

Witcom PEEK/3C-EM, based on Polyetheretherketone (PEEK)

15% carbon fibres, conductive

Properties	Test method	Unit	PEEK/3C
------------	-------------	------	---------

Physical properties

Specific gravity	ISO 1183	g/cm ³	1,38
Water absorption at saturation, 23 °C	ISO 62	%	0,45
Humidity absorption, 23 °C/50 % RH	ISO 62	%	0,2
Mould shrinkage (flow direction, 3 mm)	ISO 2577	%	0,3 - 0,5

Mechanical properties

Tensile strength (max.)	ISO 527	MPa	170
Elongation at break	ISO 527	%	1 - 3
Flexural strength	ISO 178	MPa	230
Flexural modulus	ISO 178	GPa	10
IZOD impact strength, notched	ISO 180/1eA	kJ/m ²	9,0
IZOD impact strength, unnotched	ISO 180/1eU	kJ/m ²	40

Thermal properties

Heat distortion temperature (1,81 MPa)	ISO 75	°C	315
Relative temperature index, 3 mm with impact	UL 746B	°C	220
Coefficient of linear thermal expansion	ISO 11359	K-1·10 ⁻⁵	2,3

Flammability

Burning behaviour	ISO 1210	-	V0 @ 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	960

Revision date: 17-09-2012

This information is based on our experience to date and we believe it to be reliable. It is intended as a guide for use at your discretion and risk. We cannot guarantee favourable results and assume no liability in connection with the use of the product described. None of this information is to be taken as a license to operate under, or a recommendation to infringe, any patents.