TECHNICAL DATA SHEET

Witcom PP-C/2S, based on Polypropylene (PP)

stainless steel fibres, conductive, EMI-shielding

Properties	Test methods	Units	PP-C/2S
Physical properties			
Specific gravity	ISO 1183	g/cm^3	0,98
Water absorption at saturation, 23 °C	ISO 62	%	0,02
Humidity absorption, 23 °C/50 % r.h.	ISO 62	%	0,01
Mould shrinkage (flow direction, 3 mm)	ISO 2577	%	1,5 - 2,0
Mechanical properties			
Tensile strength (max.)	ISO 527	MPa	225
Elongation at break	ISO 527	%	>10
Flexural strength	ISO 178	MPa	25
Flexural modulus	ISO 178	GPa	1,2
IZOD impact strength, notched	ISO 180/1eA	kJ/m^2	40
IZOD impact strength, unnotched	ISO 180/1eU	kJ/m^2	no break
Thermal properties			
Heat distortion temperature (1,81 MPa)	ISO 75	°C	60
Relative temperature index, 3 mm, with impact	UL 746B	°C	70
Coefficient of linear thermal expansion	ISO 11359	$K\text{-}1 \cdot 10^{-5}$	12,0
Flammability			
Burning behaviour	ISO 1210	-	HB @ 3,0 mm
UL recognition	UL94	-	-
Electrical properties			
Surface resistivity	ASTM D257	Ω/sq	10^2 - 10^5
Shielding effectiveness far field, 3 mm	ASTM D4935	dB	40 - 55
Glow wire rating, 1,6 mm	IEC 695-2-1	°C	-

Processing conditions (injection moulding)

Drying conditions (dehumidifying drier)	:	2 - 4 Hours @ 80 °C
Maximum allowable moisture content	:	0,05 %
Melt temperature	:	200 - 245 °C
Mould temperature	:	40 - 70 °C
Screw speed	:	0,1 - 0,2 m/s
Back pressure	:	0 - 0,5 MPa
Injection pressure	:	Keep to a minimum
Injection speed	:	Medium ram speed
Hold pressure	:	Keep to a minimum

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