

Technical Data Sheet



ALCOM POM 770/1.1 CF20

Base Polymer	Polyoxymethylene Copolymer
Filler/Additive System	20 % carbon fibres
Special Features	electrically conductive, reduced surface resistivity, high stiffness
Market Segment	Automotive, Machinery
Application Area	various
Typical Applications	functional components, bearings

Pre-Drying Conditions	in a dry air (dessiccant) dryer 100-110 °C for 2-3 h in an air circulating dryer 100-110 °C for 3-5 h max. moisture content <0,02 %
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Processing Injection Moulding	melt temperature 190-230 °C mould temperature 60-120 °C
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Storage	dry, protected from light
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Properties	Value	Dimension	Test Norm
Mechanical Properties			
Flexural Modulus	11500	MPa	ISO 178
Flexural Strength	100	MPa	ISO 178
Tensile Modulus	14500	MPa	ISO 527
Tensile Strength at Break	65	MPa	ISO 527
Tensile Elongation at Break	0.6	%	ISO 527
Impact Strength (Charpy, 23 °C)	12	kJ/m ²	ISO 179/1eU
Impact Strength (Charpy, -40 °C)	12	kJ/m ²	ISO 179/1eU
Notched Impact Strength (Charpy, 23 °C)	4.5	kJ/m ²	ISO 179/1eA
Notched Impact Strength (Charpy, -40 °C)	4	kJ/m ²	ISO 179/1eA
Thermal Properties			
Vicat B50	156	°C	ISO 306
HDT / A (1,8 MPa)	155	°C	ISO 75-1/-2
DSC (Melt Point)	170	°C	ISO 11357
Electrical Properties			
Surface Resistance	50	Ohm	IEC 62631-3-2
Rheological Properties			
Melt Index (MVR)	2	cm ³ /10min	ISO 1133
MVR temperature	190	°C	-
MVR load	2.16	kg	-
Shrinkage (lengthwise, 24h)	0.1 - 0.3	%	ISO 294-4
Shrinkage (lateral, 24h)	0.3 - 0.5	%	ISO 294-4
Physical Properties			
Density	1460	kg/m ³	ISO 1183