

Technical Data Sheet



ALCOM POM 770/1 GF20 PTFE15

Base Polymer	Polyoxymethylene Copolymer
Filler/Additive System	20 % glass fibres, 15 % PTFE
Special Features	improved sliding / wear, heat stabilised
Market Segment	Automotive, Machinery
Application Area	gear wheels, roller bearings
Typical Applications	functional components, bearings and sliding elements

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 dependant on moisture content
Processing Injection Moulding	melt temperature 190-230 °C mould temperature 60-120 °C
Storage	dry, protected from light

Properties	Value	Dimension	Test Norm
Mechanical Properties			
Flexural Modulus	4400	MPa	ISO 178
Flexural Stress (3.5% Strain)	66	MPa	ISO 178
Tensile Modulus	4300	MPa	ISO 527
Tensile Strength	35	MPa	ISO 527
Tensile Elongation at Break	18	%	ISO 527
Impact Strength (Charpy, 23°C)	40	kJ/m ²	ISO 179/1eU
Impact Strength (Charpy, -40°C)	32	kJ/m ²	ISO 179/1eU
Notched Impact Strength (Charpy, 23°C)	2	kJ/m ²	ISO 179/1eA
Notched Impact Strength (Charpy, -40°C)	2	kJ/m ²	ISO 179/1eA
Thermal Properties			
Vicat B50	145	°C	ISO 306
HDT / A (1,8 MPa)	120	°C	ISO 75-1/-2
DSC (Melt Point)	170	°C	ISO 11357
Rheological Properties			
Melt Index (MVR)	3.5	cm ³ /10min	ISO 1133
MVR temperature	190	°C	-
MVR load	2.16	kg	-
Shrinkage (lengthwise, 24h)	1.5 - 1.7	%	ISO 294-4
Shrinkage (lateral, 24h)	1.6 - 1.8	%	ISO 294-4
Physical Properties			
Density	1630	kg/m ³	ISO 1183