

Technical Data Sheet



ALCOM POM 770/1 PTFE18 SI2

Base Polymer	Polyoxymethylene Copolymer
Filler/Additive System	20 % PTFE/Silicone
Special Features	improved sliding / wear
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 180-220 °C mould temperature 60-100 °C
Storage	dry, protected from light

Properties	Value	Dimension	Test Norm
Mechanical Properties			
Flexural Modulus	2200	MPa	ISO 178
Flexural Stress (3.5% Strain)	55	MPa	ISO 178
Tensile Modulus	2250	MPa	ISO 527
Tensile Strength at Break	42	MPa	ISO 527
Tensile Elongation at Break	42	%	ISO 527
Impact Strength (Charpy, 23°C)	105	kJ/m ²	ISO 179/1eU
Impact Strength (Charpy, -40°C)	90	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	140	°C	ISO 306
HDT / A (1,8 MPa)	82	°C	ISO 75-1/-2
DSC (Melt Point)	170	°C	ISO 11357
Rheological Properties			
Melt Index (MVR)	6	cm ³ /10min	ISO 1133
MVR temperature	190	°C	-
MVR load	2.16	kg	-
Shrinkage (lengthwise, 24h)	2 - 2.4	%	ISO 294-4
Shrinkage (lateral, 24h)	1.7 - 2.1	%	ISO 294-4
Physical Properties			
Density	1490	kg/m ³	ISO 1183