Technical Data Sheet

ALCOM POM 770/1 PTFE18 SI2

(Last update: 05.04.2022)

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/m²	ISO 179/1eU
Impact Strength (Charpy, -40°C)	90	kJ/m²	ISO 179/1eU
Notched Impact Strength (Charpy, 23°C)	4.5	kJ/m²	ISO 179/1eA
Notched Impact Strength (Charpy, -40°C)	4	kJ/m²	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	cm³/10min	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

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Physical Properties

Density	1490	kg/m³	ISO 1183

Liability Exclusion
These are guide values and not a specification. The test values mentioned are representative values only and not binding minimum or maximum figures. These test values have been determined on standardised test specimens and can be affected by pigmentation, mould design and processing conditions.

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