Technical Data Sheet

Alcom®

MOCOM

ALCOM WP POM 5020 TF 18029

Base Polymer	Polyoxymethylene Copolymer
Filler/Additive System	20 % PTFE/Aramid
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 190-230 °C mould temperature 60-120 °C
Storage	dry, protected from light

Properties	Value	Dimension	Test Norm
Mechanical Properties			
Flexural Modulus	2600	MPa	ISO 178
Flexural Stress (3.5% Strain)	64	MPa	ISO 178
Tensile Modulus	2500	MPa	ISO 527
Tensile Strength at Break	42	MPa	ISO 527
Tensile Elongation at Break	8	%	ISO 527
Impact Strength (Charpy, 23°C)	31	kJ/m²	ISO 179/1eU
Impact Strength (Charpy, -40°C)	31	kJ/m²	ISO 179/1eU
Notched Impact Strength (Charpy, 23°C)	3	kJ/m²	ISO 179/1eA
Notched Impact Strength (Charpy, -40°C)	2.5	kJ/m²	ISO 179/1eA
Thermal Properties			
Vicat B50	148	°C	ISO 306
HDT / A (1,8 MPa)	103	°C	ISO 75-1/-2
DSC (Melt Point)	167	°C	ISO 11357
Rheological Properties			
Melt Index (MVR)	3.5	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)	1.4 - 1.8	%	ISO 294-4
Physical Properties			
Density	1450	kg/m³	ISO 1183

+135-3858-6433 (GuangDong)
+188-1699-6168 (ShangHai)
+852-6957-5415 (HongKong)

Technical Data Sheet

Alcom®

MOCOM

ALCOM WP POM 5020 TF 18029

Tribologic Properties

Coefficient of Sliding Friction μ (pv = 5*1 MPa*m/s)	0.27	-	ASTM G 137
Coefficient of Sliding Friction μH (pv = 5*1 MPa*m/s)	0.18	-	ASTM G 137
Specific Wear Rate ws (pv = 5*1 MPa*m/s)	0.25	E-6 mm^3/Nm	ASTM G 137
Linear Wear Rate w (pv = 5*1 MPa*m/s)	4.5	μm/h	ASTM G 137