Technical Data Sheet

ALCOM PA66 910/1.1 AR10 CF10

(Last update: 17.03.2021)

Base Polymer	Polyamide 66
Filler/Additive System	10 % carbon fibres,10 % aramid
Special Features	improved sliding / wear,heat stabilised,high stiffness,electrically conductive,reduced surface resistivity
Market Segment	Automotive,Machinery
Application Area	injection moulded parts
Typical Applications	functional components

Pre-Drying Conditions	in a dry air (dessiccant) dryer <80 °C for 2-12 h dependant on moisture content
Processing Injection Moulding	melt temperature 280-300 °C mould temperature 80-120 °C
Storage	dry, protected from light

Properties	Value	Dimension	Test Norm
Mechanical Properties			
Flexural Modulus	8000	MPa	ISO 178
Flexural Strength	200	MPa	ISO 178
Tensile Modulus	8300	MPa	ISO 527
Tensile Strength at Break	130	MPa	ISO 527
Tensile Elongation at Break	2	%	ISO 527
Impact Strength (Charpy, 23°C)	20	kJ/m²	ISO 179/1eU
Notched Impact Strength (Charpy, 23°C)	3.5	kJ/m²	ISO 179/1eA
Thermal Properties			
Vicat B50	250	°C	ISO 306
HDT / A (1,8 MPa)	240	°C	ISO 75-1/-2
DSC (Melt Point)	260	°C	ISO 11357
Electrical Properties			
Surface Resistance	500	Ohm	IEC 62631-3-2
Rheological Properties			
Shrinkage (lengthwise, 24h)	0.2 - 0.3	%	ISO 294-4
Shrinkage (lateral, 24h)	0.6 - 0.8	%	ISO 294-4
Physical Properties			
Density	1200	kg/m³	ISO 1183

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Tribologic Properties

Coefficient of Sliding Friction µ (pv = 5*1 MPa*m/s)	0.25	-	ASTM G 137
Coefficient of Sliding Friction µH (pv = 5*1 MPa*m/s)	0.31	-	ASTM G 137
Specific Wear Rate ws (pv = 5*1 MPa*m/s)	0.37	E-6 mm³/Nm	ASTM G 137
Linear Wear Rate w (pv = 5*1 MPa*m/s)	6.7	µm/h	ASTM G 137