

ALCOM PA66 910/1.1 CF10

(Last update: 24.08.2022)

MOCOM

Base Polymer	Polyamide 66
Filler/Additive System	10 % carbon fibres
Special Features	electrically conductive, reduced surface resistivity, heat stabilised, high stiffness
Market Segment	Automotive, Machinery
Application Area	various
Typical Applications	bearings, functional components

Pre-Drying Conditions	80 °C in a dry air (dessiccant) dryer for 2-12 h max. moisture content <0,15 %
Processing Injection Moulding	melt temperature 280-300 °C mould temperature 80-120 °C
Storage	dry, protected from light

Properties	dry/cond.	Dimension	Test Norm
Mechanical Properties			
Flexural Modulus	7400 / -	MPa	ISO 178
Flexural Strength	220 / -	MPa	ISO 178
Tensile Modulus	8100 / -	MPa	ISO 527
Tensile Strength at Break	155 / -	MPa	ISO 527
Tensile Elongation at Break	2.4 / -	%	ISO 527
Impact Strength (Charpy, 23°C)	30 / -	kJ/m ²	ISO 179/1eU
Impact Strength (Charpy, -40°C)	28 / -	kJ/m ²	ISO 179/1eU
Notched Impact Strength (Charpy, 23°C)	4 / -	kJ/m ²	ISO 179/1eA
Notched Impact Strength (Charpy, -40°C)	3 / -	kJ/m ²	ISO 179/1eA
Thermal Properties			
HDT / A (1,8 MPa)	250 / *	°C	ISO 75-1/-2
DSC (Melt Point)	263 / *	°C	ISO 11357
Electrical Properties			
Surface Resistance	* / 700	Ohm	IEC 62631-3-2
Rheological Properties			
Shrinkage (lengthwise, 24h)	0.1 - 0.3	%	ISO 294-4
Shrinkage (lateral, 24h)	0.6 - 0.8	%	ISO 294-4
Physical Properties			
Density	1170 / -	kg/m ³	ISO 1183



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Tribologic Properties

Coefficient of Sliding Friction μ ($p_v = 5 \cdot 1 \text{ MPa} \cdot \text{m/s}$)	0.26	-	ASTM G 137
Coefficient of Sliding Friction μ_H ($p_v = 5 \cdot 1 \text{ MPa} \cdot \text{m/s}$)	0.31	-	ASTM G 137
Specific Wear Rate w_s ($p_v = 5 \cdot 1 \text{ MPa} \cdot \text{m/s}$)	0.33	E-6 mm ³ /Nm	ASTM G 137
Linear Wear Rate w ($p_v = 5 \cdot 1 \text{ MPa} \cdot \text{m/s}$)	5.9	$\mu\text{m/h}$	ASTM G 137

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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