

Technical Data Sheet



ALCOM PA66 910/1 GF30 PTFE15 SI2

Base Polymer	Polyamide 66
Filler/Additive System	30 % glass fibres, 15 % PTFE, 2 % silicone
Special Features	improved sliding / wear, heat stabilised
Market Segment	Automotive, Machinery
Application Area	injection moulded parts
Typical Applications	functional components, bearings and sliding elements

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	dry/cond.	Dimension	Test Norm
Mechanical Properties			
Flexural Modulus	8500 / 6300	MPa	ISO 178
Flexural Strength	235 / 180	MPa	ISO 178
Tensile Modulus	9500 / 6500	MPa	ISO 527
Tensile Strength at Break	150 / 114	MPa	ISO 527
Tensile Elongation at Break	3.1 / 4.4	%	ISO 527
Impact Strength (Charpy, 23°C)	55 / 60	kJ/m ²	ISO 179/1eU
Impact Strength (Charpy, -40°C)	45 / -	kJ/m ²	ISO 179/1eU
Notched Impact Strength (Charpy, 23°C)	10 / 11	kJ/m ²	ISO 179/1eA
Notched Impact Strength (Charpy, -40°C)	7.5 / -	kJ/m ²	ISO 179/1eA
Thermal Properties			
HDT / A (1,8 MPa)	255 / *	°C	ISO 75-1/-2
DSC (Melt Point)	263 / *	°C	ISO 11357
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	1480 / -	kg/m ³	ISO 1183
Tribologic Properties			
Coefficient of Sliding Friction μ (pv = 5*1 MPa*m/s)	0.39	-	ASTM G 137
Coefficient of Sliding Friction μ_H (pv = 5*1 MPa*m/s)	0.19	-	ASTM G 137
Specific Wear Rate ws (pv = 5*1 MPa*m/s)	1.22	E-6 mm ³ /Nm	ASTM G 137
Linear Wear Rate w (pv = 5*1 MPa*m/s)	21.9	$\mu\text{m}/\text{h}$	ASTM G 137

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Diagrams

Stress-Strain

