

Technical Data Sheet



ALCOM PA6 900/1 CF10 IM

Base Polymer	Polyamide 6
Filler/Additive System	10 % carbon fibres
Special Features	electrically conductive, reduced surface resistivity, heat stabilised, impact modified
Market Segment	Automotive, Machinery
Application Area	injection moulded parts
Typical Applications	bearings and sliding elements, 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 270-290 °C
mould temperature 80-100 °C

Storage dry, protected from light

Properties	dry/cond.	Dimension	Test Norm
Mechanical Properties			
Flexural Modulus	6300 / 3700	MPa	ISO 178
Flexural Strength	180 / 105	MPa	ISO 178
Tensile Modulus	8400 / 4500	MPa	ISO 527
Tensile Strength at Break	130 / 90	MPa	ISO 527
Tensile Elongation at Break	4.7 / 8.7	%	ISO 527
Impact Strength (Charpy, 23°C)	60 / 90	kJ/m ²	ISO 179/1eU
Impact Strength (Charpy, -40°C)	50 / -	kJ/m ²	ISO 179/1eU
Notched Impact Strength (Charpy, 23°C)	13 / 27	kJ/m ²	ISO 179/1eA
Notched Impact Strength (Charpy, -40°C)	4.5 / -	kJ/m ²	ISO 179/1eA
Thermal Properties			
HDT / A (1,8 MPa)	204 / *	°C	ISO 75-1/-2
DSC (Melt Point)	221 / *	°C	ISO 11357
Electrical Properties			
Surface Resistance	* / 7800	Ohm	IEC 62631-3-2
Rheological Properties			
Shrinkage (lengthwise, 24h)	0.1 - 0.3	%	ISO 294-4
Shrinkage (lateral, 24h)	0.3 - 0.5	%	ISO 294-4
Physical Properties			
Density	1130 / -	kg/m ³	ISO 1183