

Technical Data Sheet



ALTECH PA6 A 4012/500 MR12

Base Polymer	Polyamide 6
Filler/Additive System	12 % mineral
Colour	grey,white
Special Features	heat stabilised,low warpage,processing stabilised,nucleated,easy release (demoulding)
Market Segment	electrical and electronic
Application Area	injection moulded parts,electrical components
Typical Applications	housings,various,functional components,handles

Pre-Drying Conditions	80 °C in a dry air (dessiccant) dryer for 2-12 h dependant on moisture content 0,15 % max. moisture content
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	3800 / -	MPa	ISO 178
Flexural Stress (3.5% Strain)	115 / -	MPa	ISO 178
Tensile Modulus	4300 / -	MPa	ISO 527
Tensile Stress at Yield	85 / -	MPa	ISO 527
Tensile Elongation at Yield	3.3 / -	%	ISO 527
Tensile Elongation at Break	9.5 / -	%	ISO 527
Impact Strength (Charpy, 23°C)	140 / -	kJ/m ²	ISO 179/1eU
Impact Strength (Charpy, -40°C)	85 / -	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)	3.5 / -	kJ/m ²	ISO 179/1eA
Thermal Properties			
HDT / A (1,8 MPa)	75 / *	°C	ISO 75-1/-2
DSC (Melt Point)	220 / *	°C	ISO 11357
Rheological Properties			
Shrinkage (lengthwise, 24h)	1.2 - 1.6	%	ISO 294-4
Shrinkage (lateral, 24h)	1.1 - 1.5	%	ISO 294-4
Physical Properties			
Density	1260 / -	kg/m ³	ISO 1183