

Technical Data Sheet



ALTECH PA6 FC 5040/500 MR40

Base Polymer	Polyamide 6
Filler/Additive System	40 % metal filler
Colour	natural color
Special Features	thermal conductive,easy release (demoulding),processing stabilised
Market Segment	Machinery,packaging,food processing industry
Application Area	injection moulded parts,food contact
Typical Applications	racking / shelving,fixing elements,housings

Pre-Drying Conditions	80 °C in a dry air (dessiccant) dryer for 2-12 h dependant on moisture content max. moisture content <0,15 %
Processing Injection Moulding	melt temperature 290-310 °C mould temperature 100-120 °C
Storage	dry, protected from light
Minimum Shelf Life	months <12

Properties	dry/cond.	Dimension	Test Norm
Mechanical Properties			
Flexural Modulus	4200 / 1300	MPa	ISO 178
Flexural Strength	95 / 32	MPa	ISO 178
Tensile Modulus	4300 / 1200	MPa	ISO 527
Tensile Strength at Break	64 / 30	MPa	ISO 527
Tensile Elongation at Break	2.8 / 95	%	ISO 527
Impact Strength (Charpy, 23°C)	50 / 85	kJ/m ²	ISO 179/1eU
Impact Strength (Charpy, -40°C)	50 / -	kJ/m ²	ISO 179/1eU
Notched Impact Strength (Charpy, 23°C)	4 / 10	kJ/m ²	ISO 179/1eA
Notched Impact Strength (Charpy, -40°C)	4 / -	kJ/m ²	ISO 179/1eA
Thermal Properties			
HDT / A (1,8 MPa)	83 / *	°C	ISO 75-1/-2
DSC (Melt Point)	220 / *	°C	ISO 11357
Rheological Properties			
Shrinkage (lengthwise, 24h)	0.9 - 1.3	%	ISO 294-4
Shrinkage (lateral, 24h)	0.8 - 1.2	%	ISO 294-4
Physical Properties			
Density	1460 / -	kg/m ³	ISO 1183