

Technical Data Sheet



ALTECH TPO A 1000/100

Base Polymer	Thermoplastic Olefin Elastomer
Colour	white
Special Features	injection moulding grade
Market Segment	Medical
Application Area	injection moulded parts
Typical Applications	protection caps

Pre-Drying Conditions	in a dry air (dessiccant) dryer 70-80 °C for 2-4 h in an air circulating dryer 70-80 °C for 2-4 h max. moisture content <0,05 %
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Processing Injection Moulding	melt temperature 240-280 °C mould temperature 70-100 °C
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Storage	dry, protected from light tightly sealed
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Minimum Shelf Life	24 months
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Properties	Value	Dimension	Test Norm
Mechanical Properties			
Flexural Modulus	450	MPa	ISO 178
Flexural Stress (3.5% Strain)	12	MPa	ISO 178
Tensile Modulus	425	MPa	ISO 527
Tensile Stress at Yield	14	MPa	ISO 527
Tensile Elongation at Yield	11	%	ISO 527
Tensile Elongation at Break	60	%	ISO 527
Impact Strength (Charpy, 23°C)	no break	kJ/m ²	ISO 179/1eU
Impact Strength (Charpy, -40°C)	33	kJ/m ²	ISO 179/1eU
Notched Impact Strength (Charpy, 23°C)	45	kJ/m ²	ISO 179/1eA
Notched Impact Strength (Charpy, -40°C)	2.5	kJ/m ²	ISO 179/1eA
Shore Hardness D (15s)	50	-	ISO 868
Thermal Properties			
Vicat A50	108	°C	ISO 306
DSC (Melt Point)	229	°C	ISO 11357
Rheological Properties			
Melt Index (MVR)	4.5	cm ³ /10min	ISO 1133
MVR temperature	250	°C	-
MVR load	2.16	kg	-
Shrinkage (lengthwise, 24h)	1.2 - 1.6	%	ISO 294-4
Shrinkage (lateral, 24h)	1.1 - 1.5	%	ISO 294-4
Physical Properties			
Density	850	kg/m ³	ISO 1183