

Technical Data Sheet



ALCOM MED PS 1000 19041

Base Polymer	Polystyrene
Special Features	injection moulding grade
Market Segment	Medical / Personal Care
Application Area	medical devices
Typical Applications	housings, various

Pre-Drying Conditions	in a dry air (dessiccant) dryer 60-80 °C for 2-3 h in an air circulating dryer 60-80 °C for 2-3 h dependant on moisture content
Processing Injection Moulding	melt temperature 180-260 °C mould temperature 10-70 °C
Storage	dry, protected from light
Minimum Shelf Life	months <12

Properties	Value	Dimension	Based on Test Norm
Mechanical Properties			
Flexural Modulus	3800	MPa	ISO 178
Flexural Strength	60	MPa	ISO 178
Tensile Modulus	3500	MPa	ISO 527
Tensile Strength at Break	38	MPa	ISO 527
Tensile Elongation at Break	1.2	%	ISO 527
Impact Strength (Charpy, 23°C)	8	kJ/m ²	ISO 179/1eU
Impact Strength (Charpy, -40°C)	8	kJ/m ²	ISO 179/1eU
Notched Impact Strength (Charpy, 23°C)	1	kJ/m ²	ISO 179/1eA
Notched Impact Strength (Charpy, -40°C)	1	kJ/m ²	ISO 179/1eA
Thermal Properties			
Vicat B50	87	°C	ISO 306
HDT / A (1,8 MPa)	75	°C	ISO 75-1/-2
Rheological Properties			
Melt Index (MVR)	13	cm ³ /10min	ISO 1133
MVR temperature	200	°C	-
MVR load	5	kg	-
Shrinkage (24h)	0.3 - 0.6	%	ISO 294-4
Physical Properties			
Density	1220	kg/m ³	ISO 1183