

DATA SHEET

MATERIAL: POLYSTYRENE

Properties

Rheological	Method	Unit	Value
Melt flow index (200 °C-5kg)	ISO 1133 H	g/10mn	4.5
Thermal			
Vicat softening point 10N (T° increase = 50 °C/h)	ISO 306A50	°C	97
Vicat softening point 50N (T° increase = 50 °C/h)	ISO 306B50	°C	87
HDT unannealed under 1.8 MPa	ISO 75-2A	°C	74
HDT annealed under 1.8 MPa	ISO 75-2A	°C	90
Coefficient of linear thermal expansion		mm/°C	9.10 E-5
Mechanical			
Notched Charpy impact strength	ISO 179/1eA	KJ/m²	11
Notched Izod impact strength	ISO 180/1A	kJ/m²	11
Tensile strength at yield	ISO 527-2	MPa	23
Tensile strength at break	ISO 527-2	MPa	21
Elongation at break	ISO 527-2	%	60
Tensile modulus	ISO 527-2	MPa	1950
Flexural modulus	ISO 178	MPa	1850
Rockwell hardness	ISO 2039-2		R 65
Electrical			
Dielectric strength		kV/mm	150
Surface resistivity	ISO IEC 93	Ohms	>10 E+13
Miscellaneous			
Density	ISO 1183	g/cm³	1.04
Moulding shrinkage		%	0.4-0.7
Water absorption	ISO 62	%	<0.1