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Polymers

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Polystyrene Impact 5240

Technical data sheet
High Heat Resistance, High Impact Polystyrene
Produced in Europe

Description

POLYSTYRENE IMPACT 5240 is a high heat resistance and high impact polystyrene for extrusion and injection applications.
The main applications are hot fill, compounding, razors.

Characteristics

	Method	Unit	Value
Rheological properties			
Melt flow index (200°C-5kg)	ISO 1133 H	g/10mn	2.3
Thermal properties			
Vicat softening point 10N (T° increase = 50°C/h)	ISO 306A50	°C	105
Vicat softening point 50N (T° increase = 50°C/h)	ISO 306B50	°C	94
HDT unannealed under 1.8 MPa	ISO 75-2A	°C	78
HDT annealed under 1.8 MPa	ISO 75-2A	°C	96
Coefficient of linear thermal expansion		mm/°C	9.10 E-5
Mechanical properties			
Notched Izod impact strength	ISO 180/1A	kJ/m ²	11
Tensile strength at yield	ISO 527-2	MPa	26
Tensile strength at break	ISO 527-2	MPa	27
Elongation at break	ISO 527-2	%	50
Flexural modulus	ISO 178	MPa	1850
Rockwell hardness	ISO 2039-2		R 76
Electrical properties			
Dielectric strength		kV/mm	150
Surface resistivity	ISO IEC 93	Ohms	>10 E+13
Miscellaneous			
Density	ISO 1183	g/cm ³	1.04
Moulding shrinkage		%	0.4-0.7
Water absorption	ISO 62	%	<0.1

- Standard properties: All tests carried out at 23°C unless otherwise stated. Mechanical properties are measured on injection moulded tests specimens.
- Bulk density: bulk density is approximately 0.6 g/cm³.

Polystyrene