

Description

POLYSTYRENE IMPACT 5240 is high heat resistant, high impact polystyrene for extrusion and injection applications.

Applications

Applications which require high heat resistance coupled with high impact.
Hot fill, compounding, razors

Properties

Rheological	Method	Unit	Value
Melt flow index (200°C-5kg)	ISO 1133 H	g/10mn	2.3
Thermal			
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			
Notched Charpy impact strength	ISO 179/1eA	kJ/m ²	11
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
Tensile modulus	ISO 527-2	MPa	1850
Flexural modulus	ISO 178	MPa	1850
Rockwell hardness	ISO 2039-2		R 76
Electrical			
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

General Information

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 of all natural grades is approximately 0.6 g/cm³

POLYSTYRENE IMPACT 5240 should be kept in cool and dry place. Avoid direct exposure to sunlight.