SAFFRON GROUP

Polystyrene Impact 3450

Product Specification

DESCRIPTION

Polystyrene Impact 3450 is a high impact polystyrene with high heat resistance, good flow, high stiffness and good aesthetics. With such an ideal balance of properties, Polystyrene Impact 3450 is well suited for the fabrication of heat resistant items by injection molding and extrusionthermoforming. In injection molding, the combination of good ow and high heat resistance of Polystyrene Impact 3450 makes short cycle times possible. In extrusion-thermoforming, Polystyrene Impact 3450 is perfectly designed for hot-hill applications.

APPLICATIONS

High heat food packaging and miscellaneous heat-resistant items, coffee cups, office equipment, house hold, toys, teletronics.

PROPERTIES

RHEOLOGICAL	METHOD	UNIT	VALUE
Melt flow index (200°C-5kg)	ISO 1133 H	g/10mn	7
THERMAL			
Vicat softening point 10N (T° increase = 50°C/h)	ISO 306A50	°C	103
Vicat softening point 50N (T° increase = 50°C/h)	ISO 306B50	°C	95
HDT unannealed under 1.8MPa	ISO 75-2A	°C	77
HDT annealed under 1.8MPa	ISO 75-2A	°C	94
Coeficient of linear thermal expansion		mm/°C	9.10 E-5
MECHANICAL			
Notched Charpy impact strength	ISO 179/1eA	KJ/m2	8
Notched Izod impact strength	ISO 180/1A	KJ/m2	8
Tensile strength at yield	ISO 527-2	Mpa	32.5
Tensile strength at break	ISO 527-2	Mpa	28
Elongation at Break	ISO 527-2	%	55
Tensile modulus	ISO 527-2	Mpa	2250
Flexural modulus	ISO 178	Mpa	2250
Rockwell hardness	ISO 2039-2		R77

FOR MORE INFORMATION :
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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
Gloss 60°	interne	%	80

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 is approximately 0.6 g/cm3.
- Please refer to the Safety Data Sheet for further information.
- Please refer to the safety data sheet (MSDS) for handling and storage information. It is advisable to convert the product within six months after delivery provided storage conditions are used as given in the MSDS of our product.

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