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Polystyrene Impact 3630

Technical data sheet
Easy flow, medium Impact Polystyrene
Produced in Europe

Description

POLYSTYRENE IMPACT 3630 is an easy flowing, medium impact polystyrene for injection moulding. This grade offers a good compromise of flow and softening point allowing for the production of large and complex articles at good cycle times. The ease of colouration and good surface finish of this grade give a wide range of applications.

The main applications are office equipment, assorted boxes, bathroom accessories, various injected articles, toys.

Characteristics

	Method	Unit	Value
Rheological properties			
Melt flow index (200°C-5kg)	ISO 1133 H	g/10mn	15
Thermal properties			
Vicat softening point 10N (T° increase = 50°C/h)	ISO 306A50	°C	89
Vicat softening point 50N (T° increase = 50°C/h)	ISO 306B50	°C	82
HDT unannealed under 1.8 MPa	ISO 75-2A	°C	66
HDT annealed under 1.8 MPa	ISO 75-2A	°C	77
Coefficient of linear thermal expansion		mm/°C	9.10 E-5
Mechanical properties			
Notched Charpy impact strength	ISO 179/1eA	KJ/m²	6
Notched Izod impact strength	ISO 180/1A	kJ/m²	6
Tensile strength at yield	ISO 527-2	MPa	32
Tensile strength at break	ISO 527-2	MPa	25
Elongation at break	ISO 527-2	%	30
Tensile modulus	ISO 527-2	MPa	2300
Flexural modulus	ISO 178	MPa	2400
Rockwell hardness	ISO 2039-2		R 84
Electrical properties			
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

Polystyrene

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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.

Handling and storage

Please refer to the safety data sheet (SDS) for handling and storage information. It is advisable to convert the product within one year after delivery provided storage conditions are used as given in the SDS of our product. SDS may be obtained from the website: www.polymers.totalenergies.com.