



**TotalEnergies**

Refining & Chemicals  
Polymers

+135-3858-6433 (GuangDong)  
+188-1699-6168 (ShangHai)  
+852-6957-5415 (HongKong)

# 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
<b>Rheological properties</b>			
Melt flow index (200°C-5kg)	ISO 1133 H	g/10mn	15
<b>Thermal properties</b>			
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
<b>Mechanical properties</b>			
Notched Charpy impact strength	ISO 179/1eA	KJ/m <sup>2</sup>	6
Notched Izod impact strength	ISO 180/1A	kJ/m <sup>2</sup>	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
<b>Electrical properties</b>			
Dielectric strength		kV/mm	150
Surface resistivity	ISO IEC 93	Ohms	>10 E+13
<b>Miscellaneous</b>			
Density	ISO 1183	g/cm <sup>3</sup>	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 is approximately 0.6 g/cm3.

Polystyrene