

Technical Data Sheet High Impact Polystyrene Manufactured in China

## Description

- TOTAL POLYSTYRENE 4440H is a high melt flow, high impact polystyrene specially designed for (hard to fill) injection molding applications.
- Its high fluidity makes it particularly suitable for the molding of large parts and the use of gas injection techniques.

## **Applications**

TV Back Cover

Electrical and Electronic

Office Automation

Properties	Method	Unit	Value (*)
Rheological		- 1	
Melt Flow Index (200°C / 5kg)	ISO 1133	g/10min	13
Spiral Flow (220°C)	-	cm	55
Thermal			·
Vicat Softening Point 10N (T° increase = 50°C/h)	ISO 306	°C	95
Coefficient of Linear Thermal Expansion	-	mm/°C	9.2
Mechanical			
Notched Izod Impact Strength	ISO 180	kJ/m²	10
Tensile Strength at Yield	ISO 527	MPa	21
Elongation at Break	ISO 527	%	60
Flexural Modulus	ISO 178	MPa	1750
Rockwell Hardness	ISO 2039	-	R95
Electrical			
Dielectric Strength	-	kV/mm	150
Surface Resistivity	ISO IEC 93	Ohms	>10 <sup>13</sup>
Others			
Density	ISO 1183	g/cm³	1.04
Moulding Shrinkage	-	%	0.4-0.7
Water Absorption	ISO 62	%	0.07
UL 94 Class	UL 94	-	HB

(\*) Data not intended for specification purposes.

\*All tests have been carried out at 23°C unless otherwise stated.

\*Mechanical properties have been measured on injection molded test specimens.

\*Bulk density is approximately  $0.6 \text{ g/cm}^3$ .

## **General Information**

- > Processing condition: Temperatures during extrusion/injection should be below 240°C.
- Recommended Pre-Dry condition: 70°C for 2 hours.
- Please refer to the safety data sheet (SDS) for handling and storage information. It is advisable to convert the product within six months after delivery provided storage conditions as given in the SDS of our product. SDS may be obtained from the website: www.totalrefiningchemicals.com

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