

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
- Office Automation
- Electrical and Electronic

Properties	Method	Unit	Value (*)
Rheological			
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/m ²	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 ¹³
Others			
Density	ISO 1183	g/cm ³	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 g/cm³.

General Information

- Processing condition: Temperatures during extrusion/injection should be below 240°C.
- Recommended Pre-Dry condition: 70°C for 2 hours.