Technical Data Sheet High Impact Polystyrene Manufactured in China

Description

- TOTAL POLYSTYRENE 4241 is a ductile high impact polystyrene for both extrusion and injection molding applications.
- This grade is especially suitable for the production of articles requiring good rigidity, dimension stability and high stiffness.

Applications

Thermoformed Sheet

Household Appliance

Properties	Method	Unit	Value (*)
Rheological	·	·	
Melt Flow Index (200°C / 5kg)	ISO 1133	g/10min	3.5
Spiral Flow (220°C)	-	cm	44
Thermal			
Vicat Softening Point 10N (T° increase = 50°C/h)	ISO 306	°C	95
Coefficient of Linear Thermal Expansion	-	mm/°C	9.1
Mechanical		·	
Notched Izod Impact Strength	ISO 180	kJ/m²	11.5
Tensile Strength at Yield	ISO 527	MPa	25
Elongation at Break	ISO 527	%	55
Flexural Modulus	ISO 178	MPa	2150
Rockwell Hardness	ISO 2039	-	R99
Electrical			
Dielectric Strength	-	kV/mm	150
Surface Resistivity	ISO IEC 93	Ohms	>10 ¹³
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

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

^(*) 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.