TOTAL 道达尔
COMMITTED TO BETTER ENERGY

Refining & Chemicals
Polymers Orient

Technical Data Sheet
Crystal Polystyrene
Manufactured in China

Description

- TOTAL POLYSTYRENE 1441 is a high melt flow crystal polystyrene designed for injection molding applications.
- This grade displays a low viscosity at high shear rate for an easy processability.

Applications

- Cutlery
- Household
- Toy

Properties	Method	Unit	Value (*)
Rheological			
Melt Flow Index (200°C / 5kg)	ISO 1133	g/10min	8
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	8.9
Mechanical			
Unnotched Izod Impact Strength	ISO 180	kJ/m²	7
Tensile Strength at Break	ISO 527	MPa	43
Elongation at Break	ISO 527	%	2
Flexural Modulus	ISO 178	MPa	2850
Rockwell Hardness	ISO 2039	-	L70
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	%	0.04

(*) 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/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

Polystyrene

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