

## 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 (*)
<b>Rheological</b>			
Melt Flow Index (200°C / 5kg)	ISO 1133	g/10min	8
Spiral Flow (220°C)	-	cm	55
<b>Thermal</b>			
Vicat Softening Point 10N (T° increase = 50°C/h)	ISO 306	°C	95
Coefficient of Linear Thermal Expansion	-	mm/°C	8.9
<b>Mechanical</b>			
Unnotched Izod Impact Strength	ISO 180	kJ/m <sup>2</sup>	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
<b>Electrical</b>			
Dielectric Strength	-	kV/mm	150
Surface Resistivity	ISO IEC 93	Ohms	>10 <sup>13</sup>
<b>Others</b>			
Density	ISO 1183	g/cm <sup>3</sup>	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<sup>3</sup>.

## General Information

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