

Description

- TOTAL TransmYrene POLYSTYRENE 1050T is a high heat resistant, high transmittance crystal polystyrene designed for optical applications.
- This distinctive grade is specially produced to maximize the light going through it and consequently improving its optical properties.

Applications

- Light Guide Panel (LGP)
- Other optical applications
- Light Diffuser Plate (LDP)

Properties	Method	Unit	Value (*)
Rheological			
Melt Flow Index (200°C / 5kg)	ISO 1133	g/10min	2.2
Thermal			
Vicat Softening Point 10N (T° increase = 50°C/h)	ISO 306	°C	105
Coefficient of Linear Thermal Expansion	-	mm/°C	8.9
Mechanical			
Unnotched Izod Impact Strength	ISO 180	kJ/m ²	8.5
Tensile Strength at Break	ISO 527	MPa	43
Elongation at Break	ISO 527	%	3
Flexural Modulus	ISO 178	MPa	2950
Rockwell Hardness	ISO 2039	-	L70
Electrical			
Dielectric Strength	-	kV/mm	150
Surface Resistivity	ISO IEC 93	Ohms	>10 ¹³
Optical			
Haze (Thickness:3.06mm)	ASTM D 1003	%	0.45
Others			
Density	ISO 1183	g/cm ³	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/cm³.

General Information

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