



TOTAL 道达尔
COMMITTED TO BETTER ENERGY

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POLYSTYRENE 1050

Technical Data Sheet
Crystal Polystyrene
Manufactured in China

Description

- TOTAL POLYSTYRENE 1050 is an ice color, high heat resistant crystal polystyrene designed for both extrusion and injection applications.
- This grade can be used pure for the production of sheets and transparent cups or in dilution with other TOTAL HIPS.

Applications

- High Heat Resistant Thermoformed Product
- Foam Extrusion
- Light Diffuser Plate (LDP)

Properties	Method	Unit	Value (*)
Rheological			
Melt Flow Index (200°C / 5kg)	ISO 1133	g/10min	2.8
Spiral Flow (220°C)	-	Cm	42
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	40
Elongation at Break	ISO 527	%	2.5
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
Others			
Density	ISO 1183	g/cm ³	1.04
Moulding Shrinkage	-	%	0.4-0.7
Water Absorption	ISO 62	%	0.04
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.

Polystyrene