

## Total PSC 1450N High Heat Resistance Polystyrene

Category : Polymer , Thermoplastic , Polystyrene (PS) , Polystyrene, Heat Resistant Grade

### Material Notes:

1450N is a high heat resistance, easy flowing crystal polystyrene for the production of thick insulation board. The low viscosity of this grade makes it particularly suitable for the production of insulation board at high thickness (10-12 cm), combining low density with good mechanical properties. This grade is not lubricated. Application Thick insulation board Information provided provided by Total Petrochemicals. Total Petrochemicals acquired former Fina and Atofina plastics product lines. This product was previously known as LACQRENE®

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_Total-PSC-1450N-High-Heat-Resistance-Polystyrene.php](http://www.lookpolymers.com/polymer_Total-PSC-1450N-High-Heat-Resistance-Polystyrene.php)

Physical Properties	Metric	English	Comments
Density	1.05 g/cc	0.0379 lb/in <sup>3</sup>	ISO 1183
Water Absorption	<= 0.10 %	<= 0.10 %	ISO 62
Linear Mold Shrinkage	0.0040 - 0.0070 cm/cm	0.0040 - 0.0070 in/in	
Melt Flow	6.5 g/10 min @Load 5.00 kg, Temperature 200 °C	6.5 g/10 min @Load 11.0 lb, Temperature 392 °F	

Mechanical Properties	Metric	English	Comments
Hardness, Rockwell L	70	70	ISO 2039-2
Tensile Strength at Break	48.0 MPa	6960 psi	ISO 527-2
Elongation at Break	3.0 %	3.0 %	ISO 527-2
Tensile Modulus	3.20 GPa	464 ksi	ISO 527-2
Flexural Modulus	2.90 GPa	421 ksi	ISO 178

Thermal Properties	Metric	English	Comments
CTE, linear	71.0 µm/m-°C @Temperature 20.0 °C	39.4 µin/in-°F @Temperature 68.0 °F	
Deflection Temperature at 0.46 MPa (66 psi)	99.0 °C	210 °F	Annealed; ISO 75-2A
Deflection Temperature at 1.8 MPa (264 psi)	84.0 °C	183 °F	Unannealed; ISO 75-2A
Vicat Softening Point	102 °C	216 °F	50N (T° increase = 5°C/h); ISO 306B50

Thermal Properties	105 °C Metric	223 °F English	10N (T° increase = 50°C/h); ISO 300408 Comments
Electrical Properties	Metric	English	Comments
Surface Resistivity per Square	>= 1.00e+14 ohm	>= 1.00e+14 ohm	ISO IEC93
Dielectric Strength	135 kV/mm	3430 kV/in	

## Contact Songhan Plastic Technology Co.,Ltd.

Website : [www.lookpolymers.com](http://www.lookpolymers.com)

Email : [sales@lookpolymers.com](mailto:sales@lookpolymers.com)

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

Address : United North Road 215,Fengxian District, Shanghai City,China