

## Total PSC 1050 High Heat Resistance, High Molecular Weight Crystal Polystyrene

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

### Material Notes:

Total Petrochemicals Polystyrene 1050 is a high heat resistance, high molecular weight crystal polystyrene mainly for the extrusion industry. It is particularly useful in the production of thick sheet by direct gassing, where it yields expanded sheets with high mechanical properties. Polystyrene Crystal 1050 can be used in dilution with HIPS for the extrusion of sheet for hot-fill thermoforming applications. Polystyrene Crystal 1050 does contain external lubrication. Suitable applications for Total Petrochemicals Polystyrene 1050 include foamed trays, shower screens and high heat thermoformed products. Information provided by Total Petrochemicals.

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_Total-PSC-1050-High-Heat-Resistance-High-Molecular-Weight-Crystal-Polystyrene.php](http://www.lookpolymers.com/polymer_Total-PSC-1050-High-Heat-Resistance-High-Molecular-Weight-Crystal-Polystyrene.php)

Physical Properties	Metric	English	Comments
Specific Gravity	1.04 g/cc	1.04 g/cc	ASTM D792
Water Absorption	0.040 %	0.040 %	ASTM D570
Linear Mold Shrinkage	0.0040 - 0.0070 cm/cm	0.0040 - 0.0070 in/in	ASTM D955
Melt Flow	2.0 g/10 min @Load 5.00 kg, Temperature 200 °C	2.0 g/10 min @Load 11.0 lb, Temperature 392 °F	ASTM D1238

Mechanical Properties	Metric	English	Comments
Hardness, Rockwell L	70	70	ASTM D785
Tensile Strength at Break	53.0 MPa	7690 psi	ASTM D638
Tensile Strength, Yield	53.0 MPa	7690 psi	ASTM D638
Elongation at Yield	3.0 %	3.0 %	ASTM D638
Flexural Modulus	3.20 GPa	464 ksi	ASTM D790
Izod Impact, Notched (ISO)	2.00 kJ/m <sup>2</sup>	0.952 ft-lb/in <sup>2</sup>	ASTM D256

Thermal Properties	Metric	English	Comments
CTE, linear	89.0 µm/m-°C	49.4 µin/in-°F	ASTM D696
Vicat Softening Point	108 °C @Load 1.02 kg	226 °F @Load 2.25 lb	50°C per hour; ASTM D1525
Heat Distortion Temperature	92.2 °C	198 °F	ASTM D648

Electrical Properties	Metric	English	Comments
Surface Resistance	$\geq 1.00 \times 10^{13}$ ohm	$\geq 1.00 \times 10^{13}$ ohm	ISO IEC 93
Dielectric Strength	152 kV/mm	3860 kV/in	ASTM D149

## Contact Songhan Plastic Technology Co.,Ltd.

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