

## Total PSC 1441 Easy Flow, High Heat Resistance Polystyrene

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

### Material Notes:

Total Petrochemicals Polystyrene 1441 is an easy flowing crystal polystyrene designed for extrusion or injection applications. In extrusion, it improves extruder output and thermoforming cycle times when mixed with a high impact polystyrene. Having high gloss, it is particularly suitable for glossy-layer co-extrusion. In injection molding, 1441, possesses low viscosity at high shear rate. It does combine excellent fluidity with a higher softening point. Suitable applications for Total Petrochemicals Polystyrene 1441 include dairy sheet, cups (dilution with HIPS), boxes, office equipment - e.g. filing trays, CD boxes, pen bodies and internal fridge parts. Information provided by Total Petrochemicals.

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_Total-PSC-1441-Easy-Flow-High-Heat-Resistance-Polystyrene.php](http://www.lookpolymers.com/polymer_Total-PSC-1441-Easy-Flow-High-Heat-Resistance-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	6.0 g/10 min @Load 5.00 kg, Temperature 200 °C	6.0 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	48.0 MPa	6960 psi	ASTM D638
Tensile Strength, Yield	48.0 MPa	6960 psi	ASTM D638
Elongation at Break	2.0 %	2.0 %	ASTM D638
Flexural Modulus	3.10 GPa	450 ksi	ASTM D790
Izod Impact, Notched (ISO)	1.50 kJ/m <sup>2</sup>	0.714 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	98.0 °C @Load 1.02 kg	208 °F @Load 2.25 lb	50°C per hour; ASTM D1525
Heat Distortion Temperature	83.9 °C	183 °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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