

Styrolution PS 542N HIPS

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

Material Notes:

Styrolution PS 542N is an impact polystyrene with high heat resistance. Information provided by Styrolution

Order this product through the following link:

http://www.lookpolymers.com/polymer_Styrolution-PS-542N-HIPS.php

Physical Properties	Metric	English	Comments
Density	1.04 g/cc	0.0376 lb/in ³	ISO 1183
Moisture Absorption at Equilibrium	<= 0.10 % @Temperature 23.0 Â°C	<= 0.10 % @Temperature 73.4 Â°F	50% RH; ISO 62
Water Absorption at Saturation	<= 0.10 % @Temperature 23.0 Â°C	<= 0.10 % @Temperature 73.4 Â°F	ISO 62
Linear Mold Shrinkage	0.0050 - 0.0070 cm/cm	0.0050 - 0.0070 in/in	ISO 294-4
Melt Flow	4.1 g/10 min @Load 5.00 kg, Temperature 200 Â°C	4.1 g/10 min @Load 11.0 lb, Temperature 392 Â°F	ISO 1133

Mechanical Properties	Metric	English	Comments
Ball Indentation Hardness	120 MPa	17400 psi	ISO 2039-1
Tensile Strength, Yield	25.0 MPa	3630 psi	ISO 527
Elongation at Break	45 %	45 %	ISO 527
Elongation at Yield	1.8 %	1.8 %	ISO 527
Tensile Modulus	1.75 GPa	254 ksi	ISO 527
Flexural Strength	40.0 MPa	5800 psi	ISO 178
Charpy Impact Unnotched	0.800 J/cm ²	3.81 ft-lb/in ²	ISO 179

Thermal Properties	Metric	English	Comments
CTE, linear	80.0 Âµm/m-Â°C	44.4 Âµin/in-Â°F	ISO 11359
Thermal Conductivity	0.160 W/m-K	1.11 BTU-in/hr-ft ² - Â°F	DIN 52612-1
Deflection Temperature at 1.8 MPa (264 psi)	85.0 Â°C	185 Â°F	ISO 75

Thermal Properties	Metric	English	Comments
Vicat Softening Point	@Load 5.10 kg	@Load 11.2 lb	120°C/h; ASTM D 1525

Electrical Properties	Metric	English	Comments
Volume Resistivity	$\geq 1.00 \times 10^{18}$ ohm-cm	$\geq 1.00 \times 10^{18}$ ohm-cm	IEC 60093
Surface Resistance	$\geq 1.00 \times 10^{13}$ ohm	$\geq 1.00 \times 10^{13}$ ohm	IEC 60093

Processing Properties	Metric	English	Comments
Melt Temperature	180 - 260 °C	356 - 500 °F	ISO 294

Contact Songhan Plastic Technology Co.,Ltd.

Website : www.lookpolymers.com

Email : sales@lookpolymers.com

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

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