

## Styrolution PS 158 N/L GPPS

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

### Material Notes:

Styrolution PS 158N/L is a heat resistant, rapid freezing general purpose grade. It is suitable for expanded sheet and film; for blends with high impact polystyrene in heat contact applications; for transparent, impact resistant applications in blends with Styrolux. High heat resistance. Rapid freezing during the molding. UL 94 HB (Antwerp only). Information provided by Styrolution

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_Styrolution-PS-158-NL-GPPS.php](http://www.lookpolymers.com/polymer_Styrolution-PS-158-NL-GPPS.php)

Physical Properties	Metric	English	Comments
Density	1.04 g/cc	0.0376 lb/in <sup>3</sup>	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	0.0030 - 0.0060 cm/cm	0.0030 - 0.0060 in/in	ISO 294-4
Melt Flow	3.3 g/10 min @Load 5.00 kg, Temperature 200 Â°C	3.3 g/10 min @Load 11.0 lb, Temperature 392 Â°F	ISO 1133

Mechanical Properties	Metric	English	Comments
Ball Indentation Hardness	150 MPa	21800 psi	ISO 2039-1
Tensile Strength, Yield	55.0 MPa	7980 psi	ISO 527
Elongation at Break	3.0 %	3.0 %	ISO 527
Tensile Modulus	3.30 GPa	479 ksi	ISO 527
Flexural Strength	103 MPa	14900 psi	ISO 178
Charpy Impact Unnotched	<= 2.50 J/cm <sup>2</sup>	<= 11.9 ft-lb/in <sup>2</sup>	ISO 179
Tensile Creep Modulus, 1 hour	3300 MPa	479000 psi	ISO 899
Tensile Creep Modulus, 1000 hours	2600 MPa	377000 psi	ISO 899

Thermal Properties	Metric	English	Comments
CTE, linear	80.0 Âµm/m-Â°C	44.4 Âµin/in-Â°F	ISO 11359

Thermal Properties Thermal Conductivity	Metric 0.170 W/m-K	English 0.12 in/hr-ftÂ°- Â°F	Comments DIN 52612-1
Deflection Temperature at 0.46 MPa (66 psi)	98.0 Â°C	208 Â°F	ISO 75
Deflection Temperature at 1.8 MPa (264 psi)	86.0 Â°C	187 Â°F	ISO 75
Vicat Softening Point	101 Â°C @Load 5.10 kg	214 Â°F @Load 11.2 lb	120Â°C/h; ASTM D 1525
	106 Â°C @Load 1.02 kg	223 Â°F @Load 2.25 lb	50Â°C/h; ISO 306
	108 Â°C @Load 1.02 kg	226 Â°F @Load 2.25 lb	120Â°C/h; ASTM D 1525
Flammability, UL94	HB	HB	

Electrical Properties	Metric	English	Comments
Volume Resistivity	>= 1.00e+18 ohm-cm	>= 1.00e+18 ohm-cm	IEC 60093
Surface Resistance	>= 1.00e+14 ohm	>= 1.00e+14 ohm	IEC 60093
Dielectric Constant	2.5 @Frequency 100 Hz	2.5 @Frequency 100 Hz	IEC 60250
Dissipation Factor	0.000050 @Frequency 1.00e+6 Hz	0.000050 @Frequency 1.00e+6 Hz	IEC 60250
	0.000090 @Frequency 100 Hz	0.000090 @Frequency 100 Hz	IEC 60250

Processing Properties	Metric	English	Comments
Melt Temperature	180 - 280 Â°C	356 - 536 Â°F	ISO 294
Mold Temperature	40.0 Â°C	104 Â°F	ISO 294
Injection Velocity	200 mm/sec	7.87 in/sec	ISO 294

## Contact Songhan Plastic Technology Co.,Ltd.

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