

## Polimeri Europa Edistir SR 550 Polystyrene

Category : Polymer , Thermoplastic , Polystyrene (PS) , Polystyrene, Impact Modified

### Material Notes:

High impact, easy flow polystyrene with good elasticity at low temperatures. Suitable for injection moulding of large or complex parts with low thickness and high impact strength. Designation: Thermoplastics ISO 2897-PS-I,M,083-12-07-18 Applications: Toys, housewares, technical items. SR 550 is certified UL94 HB "all colors" at 1.5 mm (UL file E83071). This grade in its natural version complies by composition with the requirements set by the main Regulations for plastic materials intended for food contact (including the EEC Directive 90/128 and subsequent amendments). Information provided by Polimeri Europa

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_Polimeri-Europa-Edistir-SR-550-Polystyrene.php](http://www.lookpolymers.com/polymer_Polimeri-Europa-Edistir-SR-550-Polystyrene.php)

Physical Properties	Metric	English	Comments
Bulk Density	0.650 g/cc	0.0235 lb/in <sup>3</sup>	ISO 60
Density	1.04 g/cc	0.0376 lb/in <sup>3</sup>	ISO 1183
Water Absorption	<= 0.10 %	<= 0.10 %	24 hours - 23°C; ISO 62
Linear Mold Shrinkage	0.0040 - 0.0070 cm/cm	0.0040 - 0.0070 in/in	Internal Method
Melt Flow	11 g/10 min @Load 5.00 kg, Temperature 200 °C	11 g/10 min @Load 11.0 lb, Temperature 392 °F	ISO 1133

Mechanical Properties	Metric	English	Comments
Hardness, Rockwell L	60	60	ISO 2039/2
Tensile Strength at Break	17.0 MPa	2470 psi	50 mm/min; ISO 527
Tensile Strength, Yield	18.0 MPa	2610 psi	50 mm/min; ISO 527
Elongation at Break	55 %	55 %	50 mm/min; ISO 527
Tensile Modulus	1.70 GPa	247 ksi	1 mm/min; ISO 527
Flexural Strength	32.0 MPa	4640 psi	2 mm/min; ISO 178
Izod Impact, Notched	1.10 J/cm @Thickness 3.20 mm, Temperature 23.0 °C	2.06 ft-lb/in @Thickness 0.126 in, Temperature 73.4 °F	ISO 180/4A
Izod Impact, Notched (ISO)	6.50 kJ/m <sup>2</sup> @Thickness 4.00 mm, Temperature -30.0 °C	3.09 ft-lb/in <sup>2</sup> @Thickness 0.157 in, Temperature -22.0 °F	ISO 180/1A
	9.00 kJ/m <sup>2</sup>	4.28 ft-lb/in <sup>2</sup>	

Mechanical Properties	Metric	English	ISO 180/1A Comments
	@ Thickness 4.00 mm, Temperature 23.0 °C	@ Thickness 0.157 in, Temperature 73.4 °F	

Thermal Properties	Metric	English	Comments
CTE, linear	90.0 µm/m-°C @Temperature 20.0 °C	50.0 µin/in-°F @Temperature 68.0 °F	ASTM D 696
Thermal Conductivity	0.170 W/m-K	1.18 BTU-in/hr-ft <sup>2</sup> -°F	ISO 8302
Deflection Temperature at 1.8 MPa (264 psi)	81.0 °C	178 °F	120°C/h; ASTM D 648
Vicat Softening Point	82.0 °C	180 °F	50 N - 50°C/h; ISO 306/B
	90.0 °C	194 °F	10 N - 50°C/h; ISO 306/A
Flammability, UL94	HB @Thickness 1.50 mm	HB @Thickness 0.0591 in	UL94
Glow Wire Test	650 °C @Thickness 1.60 mm	1200 °F @Thickness 0.0630 in	IEC 60695-2-1

Electrical Properties	Metric	English	Comments
Volume Resistivity	7.00e+15 ohm-cm	7.00e+15 ohm-cm	IEC 60093
Surface Resistance	1.50e+15 ohm	1.50e+15 ohm	IEC 60093
Dielectric Constant	2.5 @Frequency 50 Hz	2.5 @Frequency 50 Hz	IEC 60250
Dielectric Strength	65.0 kV/mm	1650 kV/in	IEC 60243
Dissipation Factor	0.00030 @Frequency 50 Hz	0.00030 @Frequency 50 Hz	IEC 60250
Comparative Tracking Index	500 V	500 V	Solution A; IEC 60112

Processing Properties	Metric	English	Comments
Melt Temperature	200 - 250 °C	392 - 482 °F	Injection Molding
Mold Temperature	20.0 - 60.0 °C	68.0 - 140 °F	Injection Molding

## Contact Songhan Plastic Technology Co.,Ltd.

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