

## Polimeri Europa Edistir N 2380 Polystyrene

Category : Polymer , Thermoplastic , Polystyrene (PS) , Polystyrene, Molded, Unreinforced

### Material Notes:

High molecular weight general purpose polystyrene combining high heat resistance and good mechanical strength. Suitable for direct gassing extrusion, for biaxially oriented films and sheets, for glass clear sheets and panels. Also used in injection molding of medium thick wall transparent parts. Designation: Thermoplastics ISO 1622-PS,G,105-03 Applications: Uses range from foamed packaging trays, clear panels for shower cabins, insulation boards (XPS), OPS for labels and packaging to moulded fridge clear components, Petri dishes, technical parts. N 2380 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-N-2380-Polystyrene.php](http://www.lookpolymers.com/polymer_Polimeri-Europa-Edistir-N-2380-Polystyrene.php)

Physical Properties	Metric	English	Comments
Bulk Density	0.650 g/cc	0.0235 lb/in <sup>3</sup>	ISO 60
Density	1.05 g/cc	0.0379 lb/in <sup>3</sup>	ISO 1183
Water Absorption	<= 0.10 %	<= 0.10 %	24 hours - 23°C; ISO 62
Linear Mold Shrinkage	0.0030 - 0.0060 cm/cm	0.0030 - 0.0060 in/in	Internal Method
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	ISO 1133

Mechanical Properties	Metric	English	Comments
Hardness, Rockwell M	80	80	ISO 2039/2
Tensile Strength at Break	49.0 MPa	7110 psi	5 mm/min; ISO 527
Elongation at Break	2.5 %	2.5 %	5 mm/min; ISO 527
Tensile Modulus	3.35 GPa	486 ksi	1 mm/min; ISO 527
Flexural Strength	91.0 MPa	13200 psi	2 mm/min; ISO 178
Izod Impact, Notched (ISO)	1.70 kJ/m <sup>2</sup> @Thickness 4.00 mm, Temperature -30.0 °C	0.809 ft-lb/in <sup>2</sup> @Thickness 0.157 in, Temperature -22.0 °F	ISO 180/1A
	1.90 kJ/m <sup>2</sup> @Thickness 4.00 mm, Temperature 23.0 °C	0.904 ft-lb/in <sup>2</sup> @Thickness 0.157 in, Temperature 73.4 °F	ISO 180/1A

Thermal Properties	Metric	English	Comments
CTE, linear	70.0 $\mu\text{m}/\text{m}\cdot^{\circ}\text{C}$	38.9 $\mu\text{in}/\text{in}\cdot^{\circ}\text{F}$	ASTM D 696
	@Temperature 20.0 $^{\circ}\text{C}$	@Temperature 68.0 $^{\circ}\text{F}$	
Thermal Conductivity	0.170 W/m-K	1.18 BTU-in/hr-ft <sup>2</sup> - $^{\circ}\text{F}$	ISO 8302
Deflection Temperature at 1.8 MPa (264 psi)	95.0 $^{\circ}\text{C}$	203 $^{\circ}\text{F}$	120 $^{\circ}\text{C}/\text{h}$ ; ASTM D 648
Vicat Softening Point	101 $^{\circ}\text{C}$	214 $^{\circ}\text{F}$	50 N - 50 $^{\circ}\text{C}/\text{h}$ ; ISO 306/B
	106 $^{\circ}\text{C}$	223 $^{\circ}\text{F}$	10 N - 50 $^{\circ}\text{C}/\text{h}$ ; ISO 306/A
Flammability, UL94	HB	HB	UL94
	@Thickness 1.50 mm	@Thickness 0.0591 in	
Glow Wire Test	650 $^{\circ}\text{C}$	1200 $^{\circ}\text{F}$	IEC 60695-2-1
	@Thickness 1.60 mm	@Thickness 0.0630 in	

Optical Properties	Metric	English	Comments
Transmission, Visible	90 %	90 %	transparent; thickness not quantified

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	2.5	IEC 60250
	@Frequency 50 Hz	@Frequency 50 Hz	
Dielectric Strength	70.0 kV/mm	1780 kV/in	IEC 60243
Dissipation Factor	0.00020	0.00020	IEC 60250
	@Frequency 50 Hz	@Frequency 50 Hz	
Comparative Tracking Index	425 V	425 V	Solution A; IEC 60112

Processing Properties	Metric	English	Comments
Melt Temperature	210 - 240 $^{\circ}\text{C}$	410 - 464 $^{\circ}\text{F}$	Extrusion
	220 - 270 $^{\circ}\text{C}$	428 - 518 $^{\circ}\text{F}$	Injection Molding
Mold Temperature	20.0 - 60.0 $^{\circ}\text{C}$	68.0 - 140 $^{\circ}\text{F}$	Injection Molding

Contact Songhan Plastic Technology Co.,Ltd.

**Website : [www.lookpolymers.com](http://www.lookpolymers.com)**

**Email : [sales@lookpolymers.com](mailto:sales@lookpolymers.com)**

**Tel : +86 021-51131842**

**Mobile : +86 13061808058**

**Skype : lookpolymers**

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