

Polimeri Europa Edistir N 1840 Polystyrene

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

Material Notes:

General purpose polystyrene combining easy flow and medium heat. Edistir N 1840 is suggested in extrusion for glossy capping of HIPS sheets and for blending with HIPS or clear SBS for stiffer thermoformable sheets. This grade exhibits excellent processability in injection moulding and it is recommended for complex and thin-wall parts and fast moulding cycles. Designation: Thermoplastics ISO 1622-PS,G,085-12 Applications: Thermoformed disposable packaging and glossy sheets for industrial and fridge applications. Injection moulded beverage cups, point of sales, containers for foods and cosmetics, toys, housewares, medical articles (Petri dishes). Edistir N 1840 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-1840-Polystyrene.php

Physical Properties	Metric	English	Comments
Bulk Density	0.650 g/cc	0.0235 lb/in ³	ISO 60
Density	1.05 g/cc	0.0379 lb/in ³	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	10 g/10 min @Load 5.00 kg, Temperature 200 °C	10 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	39.0 MPa	5660 psi	5 mm/min; ISO 527
Elongation at Break	1.8 %	1.8 %	5 mm/min; ISO 527
Tensile Modulus	3.25 GPa	471 ksi	1 mm/min; ISO 527
Flexural Strength	69.0 MPa	10000 psi	2 mm/min; ISO 178
Izod Impact, Notched (ISO)	1.50 kJ/m ² @Thickness 4.00 mm, Temperature -30.0 °C	0.714 ft-lb/in ² @Thickness 0.157 in, Temperature -22.0 °F	ISO 180/1A
	1.70 kJ/m ² @Thickness 4.00 mm, Temperature 23.0 °C	0.809 ft-lb/in ² @Thickness 0.157 in, Temperature 73.4 °F	ISO 180/1A

Mechanical Properties	Metric	English	Comments
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 ² - $^{\circ}\text{F}$	ISO 8302
Deflection Temperature at 1.8 MPa (264 psi)	84.0 $^{\circ}\text{C}$	183 $^{\circ}\text{F}$	120 $^{\circ}\text{C}/\text{h}$; ASTM D 648
Vicat Softening Point	88.0 $^{\circ}\text{C}$	190 $^{\circ}\text{F}$	50 N - 50 $^{\circ}\text{C}/\text{h}$; ISO 306/B
	92.0 $^{\circ}\text{C}$	198 $^{\circ}\text{F}$	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	

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	375 V	375 V	Solution A; IEC 60112

Processing Properties	Metric	English	Comments
Melt Temperature	210 - 240 $^{\circ}\text{C}$	410 - 464 $^{\circ}\text{F}$	Extrusion
	200 - 250 $^{\circ}\text{C}$	392 - 482 $^{\circ}\text{F}$	Injection Molding
Mold Temperature	10.0 - 50.0 $^{\circ}\text{C}$	50.0 - 122 $^{\circ}\text{F}$	Injection Molding

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