

Styron EMERGE[®] PC 8600-20 Polycarbonate

Category : Polymer , Thermoplastic , Polycarbonate (PC)

Material Notes:

EMERGE[®] PC 8600-20 is a translucent, ignition-resistant and easy flow polycarbonate resin. The resin contains no bromine, chlorine or phosphate additives and is intended to comply with global environmental standards. It has a UL94 flammability rating of V-0 at 1.5 mm. Applications: A broad range of injection molded applications in the electronics, electrical and information technology equipment markets. Information provided by Dow. This product line was spun off from Dow Chemical to Styron in 2010.

Order this product through the following link:

http://www.lookpolymers.com/polymer_Styron-EMERGE-8600-20-Polycarbonate.php

Physical Properties	Metric	English	Comments
Density	1.20 g/cc	0.0434 lb/in ³	ISO 1183B
Linear Mold Shrinkage	0.0050 - 0.0070 cm/cm	0.0050 - 0.0070 in/in	ISO 294-4
Melt Flow	20 g/10 min @Load 1.20 kg, Temperature 300 °C	20 g/10 min @Load 2.65 lb, Temperature 572 °F	ISO 1133

Mechanical Properties	Metric	English	Comments
Hardness, Rockwell R	123	123	ISO 2039/2
Tensile Strength at Break	58.0 MPa @Thickness 4.00 mm	8410 psi @Thickness 0.157 in	50mm/min, injection molded, unannealed; ISO 527-2
Tensile Strength, Yield	60.0 MPa @Thickness 4.00 mm	8700 psi @Thickness 0.157 in	50mm/min, injection molded, unannealed; ISO 527-2
Elongation at Break	100 % @Thickness 4.00 mm	100 % @Thickness 0.157 in	50mm/min, injection molded, unannealed; ISO 527-2
Elongation at Yield	6.0 % @Thickness 4.00 mm	6.0 % @Thickness 0.157 in	50mm/min, injection molded, unannealed; ISO 527-2
Flexural Strength	94.0 MPa @Thickness 4.00 mm	13600 psi @Thickness 0.157 in	2mm/min, injection molded, unannealed; ISO 178
Flexural Modulus	2.40 GPa @Thickness 4.00 mm	348 ksi @Thickness 0.157 in	2mm/min, injection molded, unannealed; ISO 178
Izod Impact, Notched (ISO)	50.0 kJ/m ² @Thickness 4.00 mm	23.8 ft-lb/in ² @Thickness 0.157 in	ISO 180/A

Thermal Properties	Metric	English	Comments
CTE, linear, Parallel to Flow	0.650 $\mu\text{m/m-}^{\circ}\text{C}$	0.361 $\mu\text{in/in-}^{\circ}\text{F}$	ASTM D696
Hot Ball Pressure Test	$\geq 125^{\circ}\text{C}$	$\geq 257^{\circ}\text{F}$	IEC 60335-1
Deflection Temperature at 0.46 MPa (66 psi)	136 $^{\circ}\text{C}$	277 $^{\circ}\text{F}$	unannealed; ISO 75-B
Deflection Temperature at 1.8 MPa (264 psi)	122 $^{\circ}\text{C}$	252 $^{\circ}\text{F}$	unannealed; ISO 75-A
Vicat Softening Point	143 $^{\circ}\text{C}$	289 $^{\circ}\text{F}$	50 $^{\circ}\text{C}$ / 50N; ISO 306-B50
	150 $^{\circ}\text{C}$	302 $^{\circ}\text{F}$	120 $^{\circ}\text{C}$ / 10N; ISO 306-A120
UL RTI, Electrical	125 $^{\circ}\text{C}$	257 $^{\circ}\text{F}$	UL 746
UL RTI, Mechanical with Impact	125 $^{\circ}\text{C}$	257 $^{\circ}\text{F}$	UL 746
UL RTI, Mechanical without Impact	125 $^{\circ}\text{C}$	257 $^{\circ}\text{F}$	UL 746
Flammability, UL94	V-0 @Thickness 1.50 mm	V-0 @Thickness 0.0591 in	
Oxygen Index	35 %	35 %	ISO 4589-2
Glow Wire Test	960 $^{\circ}\text{C}$ @Thickness 1.00 mm	1760 $^{\circ}\text{F}$ @Thickness 0.0394 in	IEC 60695-2-10

Processing Properties	Metric	English	Comments
Melt Temperature	260 - 280 $^{\circ}\text{C}$	500 - 536 $^{\circ}\text{F}$	
Mold Temperature	70.0 - 100 $^{\circ}\text{C}$	158 - 212 $^{\circ}\text{F}$	
Drying Temperature	125 $^{\circ}\text{C}$	257 $^{\circ}\text{F}$	
Dry Time	3 - 4 hour	3 - 4 hour	

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