

Styron EMERGE[®],ç 4731-13 Polycarbonate

Category : Polymer , Thermoplastic , Polycarbonate (PC)

Material Notes:

EMERGE[®],ç PC 4731-13 advanced resin is formulated with 10% glass fiber and has an f1 rating by Underwriters Laboratories Inc. It provides good ignition resistance, rigidity, dimension stability and UV resistance. Applications: Information Technology Equipment Power Tools Electrical Appliances and Parts 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-4731-13-Polycarbonate.php

Physical Properties	Metric	English	Comments
Specific Gravity	1.27 g/cc	1.27 g/cc	ASTM D792
Filler Content	10 %	10 %	Glass; ASTM 5630B
Linear Mold Shrinkage	0.0020 - 0.0050 cm/cm	0.0020 - 0.0050 in/in	ASTM D955
Melt Flow	13 g/10 min @Load 1.20 kg, Temperature 300 Å°C	13 g/10 min @Load 2.65 lb, Temperature 572 Å°F	ASTM D1238

Mechanical Properties	Metric	English	Comments
Hardness, Rockwell R	122	122	ASTM D785
Tensile Strength, Ultimate	62.7 MPa	9100 psi	0.125 in, injection molded, unannealed; ASTM D638
Tensile Strength, Yield	65.5 MPa	9500 psi	0.125 in, injection molded, unannealed; ASTM D638
Elongation at Break	4.0 %	4.0 %	0.125 in, injection molded, unannealed; ASTM D638
Tensile Modulus	3.65 GPa	530 ksi	0.125 in, injection molded, unannealed; ASTM D638
Flexural Strength	109 MPa	15800 psi	0.125 in, injection molded, unannealed; ASTM D790
Flexural Modulus	3.79 GPa	550 ksi	0.125 in, injection molded, unannealed; ASTM D790
Izod Impact, Notched	1.07 J/cm	2.00 ft-lb/in	ASTM D256

Thermal Properties	Metric	English	Comments
CTE, linear	37.8 Åµm/m-Å°C @Temperature -40.0 - 82.2 Å°C	21.0 Åµin/in-Å°F @Temperature -40.0 - 180 Å°F	ASTM D696

Hot Ball Pressure Test Thermal Properties	≥ 125 Å°C Metric	≥ 257 Å°F English	IEC 60335-1 Comments
Deflection Temperature at 0.46 MPa (66 psi)	149 Å°C	300 Å°F	annealed; ASTM D648
Deflection Temperature at 1.8 MPa (264 psi)	135 Å°C	275 Å°F	annealed; ASTM D648
	141 Å°C	285 Å°F	unannealed; ASTM D648
Vicat Softening Point	160 Å°C	320 Å°F	50Å°C/hr, 50N; ASTM D1525
UL RTI, Electrical	125 Å°C	257 Å°F	UL 746
UL RTI, Mechanical with Impact	105 Å°C	221 Å°F	UL 746
UL RTI, Mechanical without Impact	125 Å°C	257 Å°F	UL 746
Flammability, UL94	V-0	V-0	0.0625 in
	V-0	V-0	0.125 in
Oxygen Index	38 %	38 %	ASTM D2863

Processing Properties	Metric	English	Comments
Melt Temperature	288 - 316 Å°C	550 - 601 Å°F	
Mold Temperature	82.0 - 116 Å°C	180 - 241 Å°F	
Drying Temperature	121 Å°C	250 Å°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