



EMERGE™ PC 8600-20

Trinseo - Advanced Resin

Tuesday, November 5, 2019

General Information

Product Description

EMERGE™ PC 8600 is a translucent, ignition-resistant and easy flow polycarbonate resin. This 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 1.5mm.

Applications:

- A broad range of injection molded applications in the electronics, electrical and information technology equipment markets.

General

Material Status	• Commercial: Active		
Availability	• Asia Pacific	• Latin America	• North America
Features	• Bromine Free • Chlorine Free	• Flame Retardant • Good Flow	
Uses	• Electrical Housing	• Electrical/Electronic Applications	
Appearance	• Translucent		
Forms	• Pellets		
Processing Method	• Injection Molding		

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.20	g/cm ³	ISO 1183/B
Melt Mass-Flow Rate (MFR) (300°C/1.2 kg)	20	g/10 min	ISO 1133
Molding Shrinkage	0.50 to 0.70	%	ISO 294-4
Mechanical	Nominal Value	Unit	Test Method
Tensile Stress (Yield, 0.157 in, Injection Molded)	8700	psi	ISO 527-2/50
Tensile Stress (Break, 0.157 in, Injection Molded)	8410	psi	ISO 527-2/50
Tensile Strain (Yield, 0.157 in, Injection Molded)	6.0	%	ISO 527-2/50
Tensile Strain (Break, 0.157 in, Injection Molded)	100	%	ISO 527-2/50
Flexural Modulus ² (0.157 in, Injection Molded)	348000	psi	ISO 178
Flexural Stress ² (0.157 in, Injection Molded)	13600	psi	ISO 178
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (73°F, Injection Molded)	13	ft-lb/in	ASTM D256
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (R-Scale, 0.157 in)	123		ISO 2039-2
Thermal	Nominal Value	Unit	Test Method
Heat Deflection Temperature (66 psi, Unannealed)	277	°F	ISO 75-2/B
Heat Deflection Temperature (264 psi, Unannealed)	252	°F	ISO 75-2/A
Vicat Softening Temperature			
--	302	°F	ISO 306/A120
--	289	°F	ISO 306/B50
Ball Indentation Temperature	> 257	°F	IEC 60335-1
CLTE - Flow (-40 to 180°F)	3.6E-5	in/in/°F	ASTM D696
RTI Elec	257	°F	UL 746
RTI Imp	257	°F	UL 746
RTI Str	257	°F	UL 746

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Flammability	Nominal Value	Unit	Test Method
Flame Rating ³ (0.06 in)	V-0		UL 94
Glow Wire Ignition Temperature ³ (0.04 in)	1760	°F	IEC 60695-2-13
Oxygen Index ³	35	%	ISO 4589-2

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	257	°F
Drying Time	3.0 to 4.0	hr
Processing (Melt) Temp	500 to 536	°F
Mold Temperature	158 to 212	°F

Notes

¹ Typical properties: these are not to be construed as specifications.

² 0.079 in/min

³ This rating not intended to reflect hazards presented by this or any other material under actual fire conditions.