

CELEX™ 3600-20

Polycarbonate Resin

Overview

CELEX 3600-20 contains non-chlorinated, non-brominated & phosphate flame retardant and suitable for use by injection molding applications in the computer, electronics, electrical, and information technology equipment markets.

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	1.20 g/cm ³	1.20 g/cm ³	ASTM D792
Melt Mass-Flow Rate (MFR) (300°C/1.2 kg)	20 g/10 min	20 g/10 min	ASTM D1238
Molding Shrinkage - Flow	5.0E-3 to 7.0E-3 in/in	0.50 to 0.70 %	ASTM D955
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Modulus			ASTM D638
0.126 in (3.20 mm), Injection Molded	334000 psi	2300 MPa	
Tensile Strength			ASTM D638
Yield, 0.126 in (3.20 mm), Injection Molded	8700 psi	60.0 MPa	
Tensile Elongation			ASTM D638
Break, 0.126 in (3.20 mm), Injection Molded	110 %	110 %	
Flexural Modulus			ASTM D790
0.126 in (3.20 mm), Injection Molded	348000 psi	2400 MPa	
Flexural Strength			ASTM D790
0.126 in (3.20 mm), Injection Molded	13600 psi	93.8 MPa	
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Notched Izod Impact			ASTM D256
73°F (23°C), 0.126 in (3.20 mm), Injection Molded	13 ft·lb/in	680 J/m	
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load			ASTM D648
264 psi (1.8 MPa), Unannealed, 0.126 in (3.20 mm), Injection Molded	260 °F	127 °C	
CLTE - Flow	6.5E-5 in/in/°F	1.2E-4 cm/cm/°C	ASTM D696
RTI Elec	257 °F	125 °C	UL 746
RTI Imp	257 °F	125 °C	UL 746
RTI Str	257 °F	125 °C	UL 746
Flammability	Nominal Value (English)	Nominal Value (SI)	Test Method
Flame Rating ¹			UL 94
0.06 in (1.5 mm)	V-0	V-0	
0.10 in (2.5 mm)	5VA	5VA	
0.12 in (3.0 mm)	5VA	5VA	
Injection	Nominal Value (English)	Nominal Value (SI)	
Drying Temperature	248 °F	120 °C	
Drying Time	3.0 to 4.0 hr	3.0 to 4.0 hr	
Rear Temperature	500 to 536 °F	260 to 280 °C	
Middle Temperature	518 to 554 °F	270 to 290 °C	
Front Temperature	518 to 554 °F	270 to 290 °C	
Nozzle Temperature	536 to 572 °F	280 to 300 °C	
Mold Temperature	176 to 248 °F	80 to 120 °C	

Notes

These are typical properties only and are not to be construed as specifications. Users should confirm results by their own tests.

¹ This rating not intended to reflect hazards presented by this or any other material under actual fire conditions.



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