

CELEX™ 310HF.B

Polycarbonate Resin

Overview

CELEX™ 310HF.B glass fiber reinforced polycarbonate Resin is a 10% glass fiber reinforced polycarbonate material. It provides a property balance of easy flow, superior ignition resistance, high rigidity, dimension stability and heat resistance. It provides the injection molded part with good aesthetics.

Main Characteristics:

- No Chlorine and Bromine additives

Applications:

- Computer enclosures
- Electronic accessories and electrical appliances

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	1.26 g/cm ³	1.26 g/cm ³	ASTM D792
Melt Mass-Flow Rate (MFR) (300°C/1.2 kg)	18 g/10 min	18 g/10 min	ASTM D1238
Molding Shrinkage - Flow	1.0E-3 to 4.0E-3 in/in	0.10 to 0.40 %	ASTM D955
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Strength			ASTM D638
Yield, 0.126 in (3.20 mm), Injection Molded	11600 psi	80.0 MPa	
Tensile Elongation			ASTM D638
Break, 0.126 in (3.20 mm), Injection Molded	4.0 %	4.0 %	
Flexural Modulus			ASTM D790
0.126 in (3.20 mm), Injection Molded	587000 psi	4050 MPa	
Flexural Strength			ASTM D790
0.126 in (3.20 mm), Injection Molded	17400 psi	120 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	1.5 ft-lb/in	80 J/m	
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load			ASTM D648
264 psi (1.8 MPa), Unannealed	212 °F	100 °C	
Flammability	Nominal Value (English)	Nominal Value (SI)	Test Method
Flame Rating ¹ (0.04 in (1.0 mm))	V-0	V-0	UL 94
Injection	Nominal Value (English)	Nominal Value (SI)	
Drying Temperature	212 to 230 °F	100 to 110 °C	
Drying Time	3.0 to 4.0 hr	3.0 to 4.0 hr	
Processing (Melt) Temp	518 to 590 °F	270 to 310 °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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