

Experimental XQ 83625.00 Advanced Resin

Overview

XQ 83625.00 is a 30% glass fiber reinforced high flow ignition resistant polycarbonate resin. This resin does not contain bromine and chlorine flame retardants. XQ 83625.00 is designed with superior processability for use in structural parts of printers, scanners, copiers as well as internal parts for ITE applications.

Applications

- Structural parts of printers, scanners, and copiers
- Internal parts of ITE machines
- Enclosures of tablets and laptops

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	1.40 g/cm ³	1.40 g/cm ³	ASTM D792
Melt Mass-Flow Rate (MFR) (300°C/1.2 kg)	12 g/10 min	12 g/10 min	ASTM D1238
Molding Shrinkage - Flow	2.0E-3 to 4.0E-3 in/in	0.20 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	16800 psi	116 MPa	
Tensile Elongation			ASTM D638
Break, 0.126 in (3.20 mm), Injection Molded	3.0 %	3.0 %	
Flexural Modulus			ASTM D790
0.126 in (3.20 mm), Injection Molded	1.09E+6 psi	7500 MPa	
Flexural Strength			ASTM D790
0.126 in (3.20 mm), Injection Molded	22500 psi	155 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	2.3 ft-lb/in	130 J/m	
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load			ASTM D648
66 psi (0.45 MPa), Unannealed	198 °F	92.0 °C	
264 psi (1.8 MPa), Unannealed	214 °F	101 °C	
Flammability	Nominal Value (English)	Nominal Value (SI)	Test Method
Flame Rating ¹			UL 94
0.04 in (1.0 mm)	V-0	V-0	
0.08 in (2.0 mm)	5VA	5VA	
Injection	Nominal Value (English)	Nominal Value (SI)	
Drying Temperature	230 °F	110 °C	
Drying Time	6.0 to 8.0 hr	6.0 to 8.0 hr	
Rear Temperature	482 to 500 °F	250 to 260 °C	
Middle Temperature	500 to 518 °F	260 to 270 °C	
Front Temperature	500 to 536 °F	260 to 280 °C	
Nozzle Temperature	518 to 572 °F	270 to 300 °C	
Mold Temperature	140 to 212 °F	60 to 100 °C	