

EMERGE™ PC 6984 Advanced Resin

Overview

EMERGE™ PC 6984 Advanced Resin is an ignition-resistance, 40% glass reinforced, polycarbonate resin containing no brominated or chlorinated flame retardant additives. It is an easy flow resin with a mold release system designed for thin wall injection molding applications.

Applications:

- Information technology equipment
- Electrical parts
- Structural/ internal parts

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	1.52 g/cm ³	1.52 g/cm ³	ASTM D792
Molding Shrinkage			ASTM D955
Flow	1.0E-3 to 3.0E-3 in/in	0.10 to 0.30 %	
Across Flow	3.0E-3 to 5.0E-3 in/in	0.30 to 0.50 %	
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Modulus ¹	1.60E+6 psi	11000 MPa	ASTM D638
Tensile Strength ² (Break)	19600 psi	135 MPa	ASTM D638
Tensile Elongation ² (Break)	1.8 %	1.8 %	ASTM D638
Flexural Modulus ³	1.60E+6 psi	11000 MPa	ASTM D790
Flexural Strength ³	29000 psi	200 MPa	ASTM D790
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Notched Izod Impact (73°F (23°C))	2.5 ft-lb/in	140 J/m	ASTM D256
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load 264 psi (1.8 MPa), Unannealed	257 °F	125 °C	ASTM D648
Flammability	Nominal Value (English)	Nominal Value (SI)	Test Method
Flame Rating ⁴			UL 94
0.08 in (2.0 mm)	V-0	V-0	
0.12 in (3.0 mm)	V-0	V-0	
Injection	Nominal Value (English)	Nominal Value (SI)	
Drying Temperature	230 to 248 °F	110 to 120 °C	
Drying Time	3.0 to 4.0 hr	3.0 to 4.0 hr	
Processing (Melt) Temp	536 to 590 °F	280 to 310 °C	
Mold Temperature	176 to 248 °F	80 to 120 °C	