

Technical Information



EMERGE™ PC 4984 Advanced Resin

Overview

EMERGE™ PC 4984 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 moulding applications.

Applications:

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

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	1.50 g/cm ³	1.50 g/cm ³	ASTM D792
Molding Shrinkage			ASTM D955
Flow	1.5E-3 to 3.0E-3 in/in	0.15 to 0.30 %	
Across Flow	1.5E-3 to 4.0E-3 in/in	0.15 to 0.40 %	
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Modulus ¹	1.16E+6 psi	8000 MPa	ASTM D638
Tensile Strength ² (Break)	17400 psi	120 MPa	ASTM D638
Tensile Elongation ² (Break)	1.5 %	1.5 %	ASTM D638
Flexural Modulus ³	1.67E+6 psi	11500 MPa	ASTM D790
Flexural Strength ³	25200 psi	174 MPa	ASTM D790
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Notched Izod Impact (73°F (23°C))	1.6 ft-lb/in	86 J/m	ASTM D256
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load 264 psi (1.8 MPa), Unannealed	228 °F	109 °C	ASTM D648
Flammability	Nominal Value (English)	Nominal Value (SI)	Test Method
Flame Rating ⁴			UL 94
0.06 in (1.5 mm)	V-0	V-0	
0.08 in (2.0 mm)	V-0	V-0	
Injection	Nominal Value (English)	Nominal Value (SI)	
Drying Temperature	212 °F	100 °C	
Drying Time	3.0 to 4.0 hr	3.0 to 4.0 hr	
Processing (Melt) Temp	545 to 599 °F	285 to 315 °C	
Mold Temperature	176 to 239 °F	80 to 115 °C	

Notes

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

¹ 0.039 in/min (1.0 mm/min)

² 0.20 in/min (5.0 mm/min)

³ 0.051 in/min (1.3 mm/min)

⁴ This rating not intended to reflect hazards presented by this or any other material under actual fire conditions.

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