



Stat-Tech™ PC-08CF/000 FR V0

Polycarbonate

Key Characteristics

Product Description

Stat-Tech™ Electrically Conductive Compounds are specifically engineered to provide anti-static, ESD and RFI/EMI shielding performance for critical electronic equipment applications. These compounds combine the performance of select engineering resins with reinforcing additives such as carbon powder, carbon fiber, nickel-coated carbon fiber and stainless steel fiber, for low-to-high levels of conductivity depending upon application requirements.

General

Material Status	• Commercial: Active		
Regional Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Filler / Reinforcement	• Carbon Fiber, 8.0% Filler by Weight		
Additive	• Antistatic		
Features	• Antistatic • Electromagnetic Shielding (EMI)	• ESD Protection • Flame Retardant	• Radio Frequency Shielding (RFI)
Uses	• Aerospace Applications • Automotive Under the Hood	• Business Equipment • Electrical/Electronic Applications	• Housings • Printer Parts
RoHS Compliance	• RoHS Compliant		
Forms	• Pellets		
Processing Method	• Injection Molding		

Technical Properties ¹

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Specific Gravity	1.24	1.24	ASTM D792
Molding Shrinkage - Flow	2.0E-3 to 3.0E-3 in/in	0.20 to 0.30 %	ASTM D955
Mechanical	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Modulus ²	300000 psi	2070 MPa	ASTM D638
Tensile Strength ² (Yield)	12500 psi	86.2 MPa	ASTM D638
Tensile Elongation ² (Break)	5.0 to 10 %	5.0 to 10 %	ASTM D638
Flexural Modulus	400000 psi	2760 MPa	ASTM D790
Flexural Strength	25000 psi	172 MPa	ASTM D790
Impact	Typical Value (English)	Typical Value (SI)	Test Method
Notched Izod Impact 73°F (23°C), 0.250 in (6.35 mm), Injection Molded	1.7 ft·lb/in	91 J/m	ASTM D256A
Thermal	Typical Value (English)	Typical Value (SI)	Test Method
Deflection Temperature Under Load 66 psi (0.45 MPa), Unannealed, 0.250 in (6.35 mm)	282 °F	139 °C	ASTM D648
Deflection Temperature Under Load 264 psi (1.8 MPa), Unannealed, 0.250 in (6.35 mm)	271 °F	133 °C	ASTM D648
Electrical	Typical Value (English)	Typical Value (SI)	Test Method
Surface Resistivity	5.0E+8 to 5.0E+12 ohms	5.0E+8 to 5.0E+12 ohms	ASTM D257

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Flammability	Typical Value (English)	Typical Value (SI)	Test Method
Flame Rating			Internal Method
0.031 in (0.79 mm)	V-0	V-0	
0.06 in (1.5 mm)	V-0	V-0	
0.12 in (3.2 mm)	V-0	V-0	

Processing Information

Injection	Typical Value (English)	Typical Value (SI)
Drying Temperature	248 to 266 °F	120 to 130 °C
Drying Time	4.0 to 6.0 hr	4.0 to 6.0 hr
Rear Temperature	554 to 590 °F	290 to 310 °C
Middle Temperature	554 to 590 °F	290 to 310 °C
Front Temperature	554 to 590 °F	290 to 310 °C
Mold Temperature	176 to 230 °F	80.0 to 110 °C

Notes

¹ Typical values are not to be construed as specifications.

² Type I, 0.20 in/min (5.1 mm/min)

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