

Stat-Tech™ CTX-1125 Natural

Acrylonitrile Butadiene Styrene

Key Characteristics

Product Description

Stat-TechTM 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.

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General				
Material Status	Commercial: Active			
Regional Availability	 Africa & Middle East Asia Pacific Europe Latin America North America			
Filler / Reinforcement	Nickel-Coated Carbon Fiber			
Features	Electromagnetic Shielding (EMI)			
Uses	 Aerospace Applications Automotive Electronics Computer Components Connectors Electrical Housing Electrical/Electronic Applications 			
Forms	Pellets			
Processing Method	Injection Molding			

Technical Properties 1

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Physical	Typical Value (English)	Typical Value (SI)	Test Method
Specific Gravity	1.33	1.33	ASTM D792
Molding Shrinkage - Flow	1.0E-4 to 2.0E-3 in/in	0.010 to 0.20 %	ASTM D955
Mechanical	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Strength (Break)	11000 psi	75.8 MPa	ASTM D638
Tensile Elongation ² (Break)	1.5 %	1.5 %	ASTM D638
Flexural Modulus	1.00E+6 psi	6890 MPa	ASTM D790
Flexural Strength	17000 psi	117 MPa	ASTM D790
Impact	Typical Value (English)	Typical Value (SI)	Test Method
Notched Izod Impact			ASTM D256A
73°F (23°C), 0.125 in (3.18 mm), Injection Molded	1.0 ft·lb/in	53 J/m	
Thermal	Typical Value (English)	Typical Value (SI)	Test Method
Deflection Temperature Under Load			ASTM D648
66 psi (0.45 MPa), Unannealed	228 °F	109 °C	
Electrical	Typical Value (English)	Typical Value (SI)	Test Method
Surface Resistivity	10 to 1.0E+5 ohms	10 to 1.0E+5 ohms	ASTM D257
Volume Resistivity	10 to 1.0E+5 ohms⋅cm	10 to 1.0E+5 ohms·cm	ASTM D257
Charge Decay Time - (Mil-B-81705C), 12% RH, 5000kV to 50kV	2 msec	2 msec	
Shielding Effectiveness			
10GHz, 1/8" thickness	36 dB	36 dB	
1GHz, 1/8" thickness	16 dB	16 dB	
5GHz, 1/8" thickness	26 dB	26 dB	
Flammability	Typical Value (English)	Typical Value (SI)	Test Method
Flame Rating (Internal Method)	НВ	НВ	UL 94

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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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