

Stat-TechTM AT-10CF/000 Acetal (POM) Copolymer

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	EuropeLatin America	North America
Filler / Reinforcement	 Carbon Fiber, 10% Filler 	by Weight	
Features	AntistaticConductive	 Electrically Conductive Statically Conductive	
Uses	Aerospace ApplicationsAutomotive ElectronicsBusiness Equipment	Computer ComponentsConnectorsElectrical Housing	Electrical/Electronic ApplicationsHousings
RoHS Compliance	 RoHS Compliant 		
Forms	 Pellets 		
Processing Method	 Injection Molding 		

Technical Properties 1

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hysical	Typical Value (English)	Typical Value (SI)	Test Method
Specific Gravity	1.43	1.43	ASTM D792
Molding Shrinkage - Flow	4.0E-3 to 6.0E-3 in/in	0.40 to 0.60 %	ASTM D955
Molding Shrinkage - Across Flow	0.022 to 0.026 in/in	2.2 to 2.6 %	ASTM D955
lechanical	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Modulus ²	1.69E+6 psi	11700 MPa	ASTM D638
Tensile Strength (Break)	9040 psi	62.3 MPa	ASTM D638
Tensile Elongation ² (Break)	2.3 %	2.3 %	ASTM D638
Flexural Modulus	1.07E+6 psi	7380 MPa	ASTM D790
Flexural Strength	15500 psi	107 MPa	ASTM D790
npact	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	0.70 ft·lb/in	37 J/m	
nermal	Typical Value (English)	Typical Value (SI)	Test Method
Deflection Temperature Under Load			ASTM D648
66 psi (0.45 MPa), Unannealed, 0.250 in (6.35 mm)	322 °F	161 °C	
Deflection Temperature Under Load			ASTM D648
264 psi (1.8 MPa), Unannealed, 0.250 in (6.35 mm)	286 °F	141 °C	
lectrical	Typical Value (English)	Typical Value (SI)	Test Method
Surface Resistivity	1.0E+2 to ohms 1.0E+4	1.0E+2 to 1.0E+4 ohms	ASTM D257
Volume Resistivity	1.0E+2 to 1.0E+4 ohms⋅cm	1.0E+2 to 1.0E+4 ohms⋅cm	ASTM D257

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Rev: 2013-12-12 Page: 1 of 2

Technical Data Sheet

Electrical	Typical Value (English)	Typical Value (SI)	Test Method
Static Decay - (Mil-B-81705C), 12% RH, 5000 kV to 50 kV	3 msec	3 msec	

Processing Information

Injection	Typical Value (English)	Typical Value (SI)	
Processing (Melt) Temp	390 to 410 °F	199 to 210 °C	

Notes

¹ Typical values are not to be construed as specifications.

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Rev: 2013-12-12 Page: 2 of 2

² Type I, 0.20 in/min (5.1 mm/min)