

Stat-Tech™ AS-1000 AS Amber

Acrylonitrile Butadiene Styrene

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.

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General			
Material Status	Commercial: Active		
Regional Availability	 Africa & Middle East Asia Pacific	EuropeLatin America	North America
Features	Antistatic	 Non-Sloughing 	
Uses	Aerospace ApplicationsAutomotive ElectronicsBusiness Equipment	Computer ComponentsConnectorsElectrical Housing	Electrical/Electronic ApplicationsHousings
RoHS Compliance	 RoHS Compliant 		
Forms	 Pellets 		
Processing Method	 Injection Molding 		

Technical Properties 1

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Specific Gravity	1.10	1.10	ASTM D792
Molding Shrinkage - Flow	4.0E-3 to 6.0E-3 in/in	0.40 to 0.60 %	ASTM D955
Mechanical	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Strength (Yield)	5070 psi	35.0 MPa	ASTM D638
Flexural Modulus	3.00E+6 psi	20700 MPa	ASTM D790
Flexural Strength	8680 psi	59.8 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	3.0 ft·lb/in	160 J/m	
Thermal	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)	189°F	87.0 °C	
Deflection Temperature Under Load			ASTM D648
264 psi (1.8 MPa), Unannealed, 0.250 in (6.35 mm)	165 °F	74.0 °C	
Electrical	Typical Value (English)	Typical Value (SI)	Test Method
Surface Resistivity	1.0E+9 to 1.0E+12 ohms	1.0E+9 to 1.0E+12 ohms	ASTM D257
Volume Resistivity	1.0E+9 to 1.0E+12 ohms·cm	1.0E+9 to 1.0E+12 ohms⋅cm	ASTM D257
Static Decay			
(Mil-B-81705C), 12% RH, 5000 kV to 50 kV	0.3 sec	0.3 sec	
(Mil-B-81705C), 50% RH, 5000 kV to 50 kV	0.1 sec	0.1 sec	

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Processing Information

Injection	Typical Value (English)	Typical Value (SI)	
Processing (Melt) Temp	440 to 460 °F	227 to 238 °C	_

Notes

¹ Typical values are not to be construed as specifications.

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