

Stat-Tech™ AS-08CF/000

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.

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	
Features	Antistatic ESD Protection	
Uses	 Aerospace Applications Automotive Under the Hood Business Equipment Electrical/Electronic	
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	1.07	1.07	ASTM D792
Molding Shrinkage - Flow	3.0E-3 to 5.0E-3 in/in	0.30 to 0.50 %	ASTM D955
Water Absorption (24 hr, 0.125 in (3.18 mm))	0.25%	0.25 %	ASTM D570
lechanical	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Modulus ²	700000 psi	4830 MPa	ASTM D638
Tensile Strength ² (Yield)	10000 psi	68.9 MPa	ASTM D638
Tensile Elongation ² (Break)	2.0 to 3.0 %	2.0 to 3.0 %	ASTM D638
Flexural Modulus	680000 psi	4690 MPa	ASTM D790
Flexural Strength	12000 psi	82.7 MPa	ASTM D790
npact	Typical Value (English)	Typical Value (SI)	Test Method
Notched Izod Impact			ASTM D256A
73°F (23°C), 0.250 in (6.35 mm), Injection Molded	1.2 ft·lb/in	64 J/m	
hermal	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)	210 °F	98.9 °C	
Deflection Temperature Under Load			ASTM D648
264 psi (1.8 MPa), Unannealed, 0.250 in (6.35 mm)	205 °F	96.1 °C	
lectrical	Typical Value (English)	Typical Value (SI)	Test Method
Surface Resistivity	1.0E+5 to 1.0E+7 ohms	1.0E+5 to 1.0E+7 ohms	ASTM D257
Volume Resistivity	1.0E+4 to 1.0E+6 ohms⋅cm	1.0E+4 to 1.0E+6 ohms·cm	ASTM D257

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Processing Information

Injection	Typical Value (English)	Typical Value (SI)			
Processing (Melt) Temp	430 to 450 °F	221 to 232 °C			

Notes

¹ Typical values are not to be construed as specifications.

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² Type I, 0.20 in/min (5.1 mm/min)