



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 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
Density / 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
Mechanical	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
Impact	Typical Value (English)	Typical Value (SI)	Test Method
Notched Izod Impact 73°F (23°C), 0.250 in (6.35 mm), Injection Molded	1.2 ft-lb/in	64 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)	210 °F	98.9 °C	ASTM D648
Deflection Temperature Under Load 264 psi (1.8 MPa), Unannealed, 0.250 in (6.35 mm)	205 °F	96.1 °C	ASTM D648
Electrical	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

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.

² Type I, 0.20 in/min (5.1 mm/min)