



Stat-Tech™ AS-1000 AS

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 • North America	• South America
Features	• Antistatic	• Non-Sloughing	
Uses	• Aerospace Applications • Automotive Electronics • Business Equipment	• Computer Components • Connectors • Electrical Housing	• Electrical/Electronic Applications • Housings
RoHS Compliance	• RoHS Compliant		
Forms	• Pellets		
Processing Method	• Injection Molding		

Technical Properties ¹

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Specific Gravity	1.06	1.06 g/cm ³	ASTM D792
Melt Mass-Flow Rate (MFR)	8.5 g/10 min	8.5 g/10 min	ASTM D1238
Molding Shrinkage - Flow	0.0040 to 0.0060 in/in	0.40 to 0.60 %	ASTM D955
Molding Shrinkage - Across Flow	0.0040 to 0.0060 in/in	0.40 to 0.60 %	ASTM D955
Mechanical	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Modulus ²	282000 psi	1940 MPa	ASTM D638
Tensile Strength (Break)	5070 psi	35.0 MPa	ASTM D638
Tensile Elongation ² (Break)	12 %	12 %	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 73°F (23°C), 0.125 in (3.18 mm), Injection Molded	4.0 ft·lb/in	210 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)	189 °F	87.0 °C	ASTM D648
Deflection Temperature Under Load 264 psi (1.8 MPa), Unannealed, 0.250 in (6.35 mm)	165 °F	74.0 °C	ASTM D648
Electrical	Typical Value (English)	Typical Value (SI)	Test Method
Surface Resistivity	1.0E+11 to 1.0E+12 ohm	1.0E+11 to 1.0E+12 ohm	ASTM D257
Volume Resistivity	1.0E+11 to 1.0E+12 ohm·cm	1.0E+11 to 1.0E+12 ohm·cm	ASTM D257

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Electrical	Typical Value (English)	Typical Value (SI)	Test Method
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	

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.

² Type I, 0.20 in/min (5.1 mm/min)

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