



Stat-Tech™ ST7300-0005

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, 15% Filler by Weight		
Features	• Electrically Conductive • Electromagnetic Shielding (EMI)	• ESD Protection • Radio Frequency Shielding (RFI)	
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
Specific Gravity	1.11	1.11	ASTM D792
Molding Shrinkage - Flow	5.0E-4 to 2.0E-3 in/in	0.050 to 0.20 %	ASTM D955
Mechanical	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Strength ² (Yield)	10200 psi	70.3 MPa	ASTM D638
Flexural Modulus	1.40E+6 psi	9650 MPa	ASTM D790
Flexural Strength	15000 psi	103 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	1.0 ft-lb/in	53 J/m	ASTM D256A
Thermal	Typical Value (English)	Typical Value (SI)	Test Method
Deflection Temperature Under Load 66 psi (0.45 MPa), Unannealed, 0.125 in (3.18 mm)	212 °F	100 °C	ASTM D648
Deflection Temperature Under Load 264 psi (1.8 MPa), Unannealed, 0.125 in (3.18 mm)	203 °F	95.0 °C	ASTM D648
Electrical	Typical Value (English)	Typical Value (SI)	Test Method
Surface Resistivity	1.0E+2 to 5.0E+4 ohms	1.0E+2 to 5.0E+4 ohms	ASTM D257
Volume Resistivity	1.0E+2 to 5.0E+4 ohms·cm	1.0E+2 to 5.0E+4 ohms·cm	ASTM D257

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Processing Information

Injection	Typical Value (English)	Typical Value (SI)
Drying Temperature	176 to 185 °F	80.0 to 85.0 °C
Drying Time	2.0 hr	2.0 hr
Processing (Melt) Temp	430 to 480 °F	221 to 249 °C
Mold Temperature	149 to 185 °F	65.0 to 85.0 °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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