



Stat-Tech™ AS-1000 AS Black

Acrylonitrile Butadiene Styrene

Key Characteristics

Product Description			
Stat-Tech™ Compound combines ABS with anti-static additives.			
General			
Material Status	• Commercial: Active		
Regional Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North 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
Density / Specific Gravity	1.09	1.09	ASTM D792
Molding Shrinkage - Flow	1.0E-3 to 9.0E-3 in/in	0.10 to 0.90 %	ASTM D955
Molding Shrinkage - Across Flow	0.010 to 0.030 in/in	1.0 to 3.0 %	ASTM D955
Mechanical	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Modulus ²	189000 psi	1300 MPa	ASTM D638
Tensile Strength (Yield)	5220 psi	36.0 MPa	ASTM D638
Tensile Elongation ² (Break)	12 %	12 %	ASTM D638
Flexural Modulus	230000 psi	1590 MPa	ASTM D790
Flexural Strength	7250 psi	50.0 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	2.6 ft-lb/in	140 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)	180 °F	82.0 °C	ASTM D648
Deflection Temperature Under Load 264 psi (1.8 MPa), Unannealed, 0.250 in (6.35 mm)	156 °F	69.0 °C	ASTM D648
Electrical	Typical Value (English)	Typical Value (SI)	Test Method
Surface Resistivity (0.125 in (3.18 mm))	1.0E+9 to 1.0E+11 ohms	1.0E+9 to 1.0E+11 ohms	ASTM D257
Volume Resistivity (0.125 in (3.18 mm))	1.0E+9 to 1.0E+11 ohms·cm	1.0E+9 to 1.0E+11 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	

Processing Information

Injection	Typical Value (English)	Typical Value (SI)
Drying Temperature	190 °F	88 °C
Drying Time	2.0 to 4.0 hr	2.0 to 4.0 hr
Suggested Max Moisture	0.010 to 0.15 %	0.010 to 0.15 %
Rear Temperature	400 to 475 °F	204 to 246 °C
Middle Temperature	400 to 475 °F	204 to 246 °C
Front Temperature	400 to 475 °F	204 to 246 °C
Nozzle Temperature	420 to 500 °F	216 to 260 °C
Mold Temperature	140 to 200 °F	60 to 93 °C

Notes

¹ Typical values are not to be construed as specifications.

² Type I, 0.20 in/min (5.1 mm/min)