



Stat-Tech™ AS-20CF/000 BK001

Acrylonitrile Butadiene Styrene

Key Characteristics

Product Description			
20 % carbon fiber reinforced ABS compound			
General			
Material Status	• Commercial: Active		
Regional Availability	• Asia Pacific		
Filler / Reinforcement	• Carbon Fiber, 20% Filler by Weight		
Features	• ESD Protection		
Uses	• Aerospace Applications • Business Equipment • Automotive Under the Hood • Electrical/Electronic Applications • Housings • Printer Parts		
RoHS Compliance	• RoHS Compliant		
Appearance	• Black		
Forms	• Pellets		
Processing Method	• Injection Molding		

Technical Properties ¹

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Specific Gravity	1.15	1.15	ASTM D792
Molding Shrinkage - Flow	1.5E-3 to 2.0E-3 in/in	0.15 to 0.20 %	ASTM D955
Mechanical	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Strength ² (Yield)	14500 psi	100 MPa	ASTM D638
Tensile Elongation ² (Break)	2.5 to 4.0 %	2.5 to 4.0 %	ASTM D638
Flexural Modulus	1.10E+6 psi	7600 MPa	ASTM D790
Flexural Strength	20300 psi	140 MPa	ASTM D790
Impact	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	0.94 ft·lb/in	50 J/m	
Thermal	Typical Value (English)	Typical Value (SI)	Test Method
Deflection Temperature Under Load			ASTM D648
66 psi (0.45 MPa), Unannealed, 0.125 in (3.18 mm)	185 °F	85.0 °C	
Deflection Temperature Under Load			ASTM D648
264 psi (1.8 MPa), Unannealed, 0.125 in (3.18 mm)	167 °F	75.0 °C	
Electrical	Typical Value (English)	Typical Value (SI)	Test Method
Surface Resistivity	1.0E+4 to 1.0E+6 ohms	1.0E+4 to 1.0E+6 ohms	ASTM D257
Flammability	Typical Value (English)	Typical Value (SI)	Test Method
Flame Rating	HB	HB	Internal Method

Processing Information

Injection	Typical Value (English)	Typical Value (SI)
Drying Temperature	176 to 185 °F	80.0 to 85.0 °C
Drying Time	4.0 hr	4.0 hr

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Injection	Typical Value (English)	Typical Value (SI)
Processing (Melt) Temp	428 to 482 °F	220 to 250 °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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