



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 • Automotive Under the Hood	• Business Equipment • 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 73°F (23°C), 0.250 in (6.35 mm), Injection Molded	0.94 ft·lb/in	50 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)	185 °F	85.0 °C	ASTM D648
Deflection Temperature Under Load 264 psi (1.8 MPa), Unannealed, 0.125 in (3.18 mm)	167 °F	75.0 °C	ASTM D648
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)

CONTACT INFORMATION**Americas**

United States - Avon Lake
+1 440 930 1000

United States - McHenry
+1 815 385 8500

Asia

China - Guangzhou
+86 20 8732 7260

China - Shenzhen
+86 755 2969 2888

China - Suzhou
+86 512 6823 24 38

China - Suzhou
+86 512 6265 2600

Hong Kong -
+852 2690 5332

Taiwan - Yonghe City,
+886 9396 99740, +886 2929 1849

Europe

Germany - Gaggenau
+49 7225 6802 0

Spain - Barbastro (Huesca)
+34 974 310 314



Beyond Polymers.

Better Business Solutions.™

www.polyone.com

PolyOne Americas

33587 Walker Road
Avon Lake, Ohio 44012
United States
+1 440 930 1000
+1 866 POLYONE

PolyOne Asia

No. 88 Guoshoujing Road
Z.J Hi-tech Park, Pudong
Shanghai, 201203, China
+86 21 5080 1188

PolyOne Europe

6 Giällewee
+352 269 050 35

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