



# Stat-Tech™ AT-10CF/000

## Acetal (POM) Copolymer

### 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, 10% Filler by Weight		
Features	• Antistatic • Conductive	• Electrically Conductive • Statically Conductive	
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 <sup>1</sup>

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Density / Specific Gravity	1.43	1.43	ASTM D792
Molding Shrinkage - Flow	4.0E-3 to 6.0E-3 in/in	0.40 to 0.60 %	ASTM D955
Molding Shrinkage - Across Flow	0.022 to 0.026 in/in	2.2 to 2.6 %	ASTM D955
Mechanical	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Modulus <sup>2</sup>	1.69E+6 psi	11700 MPa	ASTM D638
Tensile Strength (Break)	9040 psi	62.3 MPa	ASTM D638
Tensile Elongation <sup>2</sup> (Break)	2.3 %	2.3 %	ASTM D638
Flexural Modulus	1.07E+6 psi	7380 MPa	ASTM D790
Flexural Strength	15500 psi	107 MPa	ASTM D790
Impact	Typical Value (English)	Typical Value (SI)	Test Method
Notched Izod Impact			ASTM D256A
73°F (23°C), 0.125 in (3.18 mm), Injection Molded	0.70 ft-lb/in	37 J/m	
Thermal	Typical Value (English)	Typical Value (SI)	Test Method
Deflection Temperature Under Load			ASTM D648
66 psi (0.45 MPa), Unannealed, 0.250 in (6.35 mm)	322 °F	161 °C	
Deflection Temperature Under Load			ASTM D648
264 psi (1.8 MPa), Unannealed, 0.250 in (6.35 mm)	286 °F	141 °C	
Electrical	Typical Value (English)	Typical Value (SI)	Test Method
Surface Resistivity	1.0E+2 to 1.0E+4 ohms	1.0E+2 to 1.0E+4 ohms	ASTM D257
Volume Resistivity	1.0E+2 to 1.0E+4 ohms-cm	1.0E+2 to 1.0E+4 ohms-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	3 msec	3 msec	

### Processing Information

Injection	Typical Value (English)	Typical Value (SI)
Processing (Melt) Temp	390 to 410 °F	199 to 210 °C

### Notes

<sup>1</sup> Typical values are not to be construed as specifications.

<sup>2</sup> 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



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[www.polyone.com](http://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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