



# Stat-Tech™ PP-1000 AS Black

## Polypropylene 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
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 <sup>1</sup>

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Specific Gravity	0.930	0.930	ASTM D792
Molding Shrinkage - Flow	1.0E-3 to 0.010 in/in	0.10 to 1.0 %	ASTM D955
Mechanical	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Strength (Yield)	3220 psi	22.2 MPa	ASTM D638
Tensile Elongation <sup>2</sup> (Break)	30 %	30 %	ASTM D638
Flexural Modulus	120000 psi	827 MPa	ASTM D790
Flexural Strength	4000 psi	27.6 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	9.0 ft·lb/in	480 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)	158 °F	70.0 °C	ASTM D648
Deflection Temperature Under Load 264 psi (1.8 MPa), Unannealed, 0.250 in (6.35 mm)	109 °F	43.0 °C	ASTM D648
Electrical	Typical Value (English)	Typical Value (SI)	Test Method
Surface Resistivity	1.0E+8 to 1.0E+12 ohms	1.0E+8 to 1.0E+12 ohms	ASTM D257
Volume Resistivity	1.0E+8 to 1.0E+12 ohms·cm	1.0E+8 to 1.0E+12 ohms·cm	ASTM D257

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## Processing Information

Injection	Typical Value (English)	Typical Value (SI)
Rear Temperature	425 to 460 °F	218 to 238 °C
Middle Temperature	415 to 450 °F	213 to 232 °C
Front Temperature	405 to 440 °F	207 to 227 °C
Nozzle Temperature	415 to 450 °F	213 to 232 °C
Mold Temperature	150 to 180 °F	65.6 to 82.2 °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)

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