



Stat-Tech™ PC-10CF/000 FR V0 BLACK

Polycarbonate

Key Characteristics

Product Description

Carbon Fiber Filled, Non-halogen Containing Flame Retardant Polycarbonate Compound

General

Material Status	• Commercial: Active
Regional Availability	• Asia Pacific
Filler / Reinforcement	• Carbon Fiber, 10% Filler by Weight
Features	• Flame Retardant • Halogen Free
Appearance	• Black
Forms	• Pellets
Processing Method	• Injection Molding

Technical Properties ¹

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Specific Gravity	1.24	1.24	ASTM D792
Molding Shrinkage (0.118 in (3.00 mm))	0.20 to 0.40 %	0.20 to 0.40 %	ISO 294-4
Mechanical	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Strength ²	14500 psi	100 MPa	ASTM D638
Tensile Elongation ² (Break)	3.0 %	3.0 %	ASTM D638
Flexural Modulus ³	943000 psi	6500 MPa	ASTM D790
Flexural Strength ³	21800 psi	150 MPa	ASTM D790
Impact	Typical Value (English)	Typical Value (SI)	Test Method
Notched Izod Impact			ASTM D256A
73°F (23°C), 0.126 in (3.20 mm), Injection Molded	1.3 ft-lb/in	70 J/m	
Thermal	Typical Value (English)	Typical Value (SI)	Test Method
Deflection Temperature Under Load 66 psi (0.45 MPa), Unannealed	284 °F	140 °C	ASTM D648
Deflection Temperature Under Load 264 psi (1.8 MPa), Unannealed	275 °F	135 °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			UL 94
0.06 in (1.5 mm)	V-1	V-1	
0.12 in (3.0 mm)	V-0	V-0	

Processing Information

Injection	Typical Value (English)	Typical Value (SI)
Drying Temperature	230 to 266 °F	110 to 130 °C
Drying Time	4.0 to 6.0 hr	4.0 to 6.0 hr
Processing (Melt) Temp	536 to 590 °F	280 to 310 °C
Mold Temperature	176 to 248 °F	80.0 to 120 °C

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Injection Notes

Injection Pressure: MED-HIGH
Hold Pressure: MED-HIGH
Screw Speed: MODERATE
Back Pressure: LOW

Notes

¹ Typical values are not to be construed as specifications.

² 0.20 in/min (5.0 mm/min)

³ 0.051 in/min (1.3 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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