



Edgetek™ PC-40GF/000 BK001

Polycarbonate

Key Characteristics

General

Material Status	• Commercial: Active
Regional Availability	• Asia Pacific
Filler / Reinforcement	• Glass Fiber, 40% Filler by Weight
Appearance	• Black
Processing Method	• Injection Molding

Technical Properties ¹

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Specific Gravity	1.50	1.50	ASTM D792
Molding Shrinkage - Flow	1.0E-3 to 3.0E-3 in/in	0.10 to 0.30 %	ASTM D955
Mechanical	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Strength ²	20300 psi	140 MPa	ASTM D638
Tensile Elongation ² (Break)	3.0 %	3.0 %	ASTM D638
Flexural Modulus ³	1.45E+6 psi	10000 MPa	ASTM D790
Flexural Strength ³	26100 psi	180 MPa	ASTM D790
Impact	Typical Value (English)	Typical Value (SI)	Test Method
Notched Izod Impact 73°F (23°C), 0.126 in (3.20 mm)	2.7 ft·lb/in	150 J/m	ASTM D256
Thermal	Typical Value (English)	Typical Value (SI)	Test Method
Deflection Temperature Under Load 264 psi (1.8 MPa), Unannealed, 0.126 in (3.20 mm)	284 °F	140 °C	ASTM D648
Electrical	Typical Value (English)	Typical Value (SI)	Test Method
Surface Resistivity	1.0E+15 ohms	1.0E+15 ohms	ASTM D257
Volume Resistivity	1.0E+17 ohms·cm	1.0E+17 ohms·cm	ASTM D257
Flammability	Typical Value (English)	Typical Value (SI)	Test Method
Flame Rating (0.13 in (3.2 mm))	HB	HB	UL 94

Processing Information

Injection	Typical Value (English)	Typical Value (SI)
Drying Temperature	230 to 266 °F	110 to 130 °C
Drying Time	3.0 to 4.0 hr	3.0 to 4.0 hr
Rear Temperature	536 to 590 °F	280 to 310 °C
Middle Temperature	536 to 590 °F	280 to 310 °C
Front Temperature	536 to 590 °F	280 to 310 °C
Mold Temperature	176 to 248 °F	80.0 to 120 °C

Injection Notes

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

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Notes¹ 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 1000United States - McHenry
+1 815 385 8500**Asia**China - Guangzhou
+86 20 8732 7260China - Shenzhen
+86 755 2969 2888China - Suzhou
+86 512 6823 24 38China - Suzhou
+86 512 6265 2600Hong Kong -
+852 2690 5332Taiwan - Yonghe City,
+886 9396 99740, +886 2929 1849**Europe**Germany - Gaggenau
+49 7225 6802 0Spain - Barbastro (Huesca)
+34 974 310 314*Beyond Polymers.**Better Business Solutions.™*

www.polyone.com

PolyOne Americas33587 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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