



Edgetek™ PC-40GF/000 BK008

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
Density / 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			ASTM D256
73°F (23°C), 0.126 in (3.20 mm)	2.7 ft·lb/in	150 J/m	
Thermal	Typical Value (English)	Typical Value (SI)	Test Method
Deflection Temperature Under Load			ASTM D648
264 psi (1.8 MPa), Unannealed, 0.126 in (3.20 mm)	284 °F	140 °C	
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 to 120 °C

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)



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