



# Edgetek™ PC-20GF/000 FR BK

## Polycarbonate

### Key Characteristics

Product Description	
20% glass fiber reinforced polycarbonate compound	
General	
Material Status	• Commercial: Active
Regional Availability	• Asia Pacific
Filler / Reinforcement	• Glass Fiber, 20% Filler by Weight
Appearance	• Black
Processing Method	• Injection Molding

### Technical Properties <sup>1</sup>

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Specific Gravity	1.34	1.34	ASTM D792
Molding Shrinkage	0.20 to 0.50 %	0.20 to 0.50 %	ASTM D955
Mechanical	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Strength <sup>2</sup>	16000 psi	110 MPa	ASTM D638
Flexural Modulus <sup>3</sup>	870000 psi	6000 MPa	ASTM D790
Flexural Strength <sup>3</sup>	21800 psi	150 MPa	ASTM D790
Impact	Typical Value (English)	Typical Value (SI)	Test Method
Notched Izod Impact			ASTM D256
73°F (23°C), 0.252 in (6.40 mm)	2.2 ft-lb/in	120 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	
Flammability	Typical Value (English)	Typical Value (SI)	Test Method
Flame Rating			UL 94
0.0591 in (1.50 mm)	V-2	V-2	
0.118 in (3.00 mm)	V-0	V-0	
Glow Wire Flammability Index			Internal Method
0.0591 in (1.50 mm)	1560 °F	850 °C	
0.118 in (3.00 mm)	1650 °F	900 °C	
Glow Wire Ignition Temperature			Internal Method
0.0591 in (1.50 mm)	1470 °F	800 °C	
0.118 in (3.00 mm)	1560 °F	850 °C	

### 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

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**Injection Notes**

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

**Notes**

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

<sup>2</sup> 0.20 in/min (5.0 mm/min)

<sup>3</sup> 0.051 in/min (1.3 mm/min)

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