



## Edgetek™ PC-20GF/000 FR BLK

### 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 (0.118 in (3.00 mm))            | 0.25 to 0.50 %          | 0.25 to 0.50 %     | ISO 294-4       |
| 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             |                 |
| Electrical                                        | Typical Value (English) | Typical Value (SI) | Test Method     |
| Surface Resistivity                               | 1.0E+15 ohms            | 1.0E+15 ohms       | ASTM D257       |
| Flammability                                      | Typical Value (English) | Typical Value (SI) | Test Method     |
| Flame Rating (0.126 in (3.20 mm))                 | V-0                     | V-0                | Internal Method |

#### 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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**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)**CONTACT INFORMATION****Americas**United States - Avon Lake  
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