



# Edgetek™ PC-20GF/000 NH FRV0 BLK

## Polycarbonate

### Key Characteristics

#### Product Description

Glass Fiber Reinforced, Impact Modified, Non-halogen Containing Flame Retardant Polycarbonate Compound. UL listed.

#### General

|                        |                                  |
|------------------------|----------------------------------|
| Material Status        | • Commercial: Active             |
| Regional Availability  | • Asia Pacific                   |
| Filler / Reinforcement | • Glass Fiber                    |
| Features               | • Flame Retardant • Halogen Free |
| 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))            | 0.20 to 0.50 %          | 0.20 to 0.50 %     | ISO 294-4       |
| Mechanical                                        | Typical Value (English) | Typical Value (SI) | Test Method     |
| Tensile Strength <sup>2</sup>                     | 16700 psi               | 115 MPa            | ASTM D638       |
| Tensile Elongation <sup>2</sup> (Break)           | 3.0 %                   | 3.0 %              | 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), 0.126 in (3.20 mm)                   | 3.0 ft-lb/in            | 160 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) | 275 °F                  | 135 °C             |                 |
| Electrical                                        | Typical Value (English) | Typical Value (SI) | Test Method     |
| Surface Resistivity                               | > 1.0E+12 ohms          | > 1.0E+12 ohms     | ASTM D257       |
| Flammability                                      | Typical Value (English) | Typical Value (SI) | Test Method     |
| Flame Rating                                      |                         |                    |                 |
| 0.0394 in (1.00 mm)                               | V-1                     | V-1                | Internal Method |
| 0.0591 in (1.50 mm)                               | V-0                     | V-0                | UL 94           |

### 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     |

#### 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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