



# Stat-Tech™ PC-15CF/000 FR V0 BK702

## Polycarbonate

### Key Characteristics

| Product Description                                                                    |                                  |
|----------------------------------------------------------------------------------------|----------------------------------|
| Carbon Fiber Reinforced, Non-halogen Containing Flame Retardant Polycarbonate Compound |                                  |
| General                                                                                |                                  |
| Material Status                                                                        | • Commercial: Active             |
| Regional Availability                                                                  | • Asia Pacific                   |
| Filler / Reinforcement                                                                 | • Carbon 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                                                            | 1.32                    | 1.32                  | ASTM D792       |
| Mechanical                                                                  | Typical Value (English) | Typical Value (SI)    | Test Method     |
| Tensile Strength <sup>2</sup>                                               | 17400 psi               | 120 MPa               | ASTM D638       |
| Tensile Elongation <sup>2</sup> (Break)                                     | 3.0 %                   | 3.0 %                 | ASTM D638       |
| Flexural Modulus <sup>3</sup>                                               | 1.09E+6 psi             | 7500 MPa              | ASTM D790       |
| Flexural Strength <sup>3</sup>                                              | 26100 psi               | 180 MPa               | ASTM D790       |
| Impact                                                                      | Typical Value (English) | Typical Value (SI)    | Test Method     |
| Notched Izod Impact<br>73°F (23°C), 0.126 in (3.20 mm),<br>Injection Molded | 1.2 ft-lb/in            | 65 J/m                | ASTM D256A      |
| Thermal                                                                     | Typical Value (English) | Typical Value (SI)    | Test Method     |
| Deflection Temperature Under Load<br>264 psi (1.8 MPa), Unannealed          | 284 °F                  | 140 °C                | ASTM D648       |
| Electrical                                                                  | Typical Value (English) | Typical Value (SI)    | Test Method     |
| Surface Resistivity                                                         | 1.0E+3 to 1.0E+5 ohms   | 1.0E+3 to 1.0E+5 ohms | ASTM D257       |
| Flammability                                                                | Typical Value (English) | Typical Value (SI)    | Test Method     |
| Flame Rating (0.06 in (1.6 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            | 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  
+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](http://www.polyone.com)**PolyOne Americas**33587 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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