



# Stat-Tech™ PC-15CF/000 FCR BLK001

## Polycarbonate

### Key Characteristics

| Product Description                                       |                      |
|---|----------------------|
| Carbon Fiber Reinforced Polycarbonate Compound, UL listed |                      |
| General   |                      |
| Material Status   | • Commercial: Active |
| Regional Availability                                     | • Asia Pacific       |
| Filler / Reinforcement                                    | • Carbon Fiber       |
| Appearance  | • Black              |
| Processing Method   | • Injection Molding  |

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

| Physical                               | Typical Value (English) | Typical Value (SI)    | Test Method     |
|--|-------------------------|-----------------------|-----------------|
| Density / Specific Gravity             | 1.25                    | 1.25                  | ASTM D792       |
| Molding Shrinkage (0.118 in (3.00 mm)) | 0.10 to 0.30 %          | 0.10 to 0.30 %        | Internal Method |
| Mechanical                             | Typical Value (English) | Typical Value (SI)    | Test Method     |
| Tensile Strength <sup>2</sup>          | 17300 psi               | 119 MPa               | ASTM D638       |
| Flexural Modulus <sup>3</sup>          | 1.16E+6 psi             | 8000 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                    |                         |                       | ASTM D256       |
| 73°F (23°C), 0.126 in (3.20 mm)        | 1.5 ft-lb/in            | 78 J/m                |                 |
| Thermal                                | Typical Value (English) | Typical Value (SI)    | Test Method     |
| Deflection Temperature Under Load      |                         |                       | ASTM D648       |
| 264 psi (1.8 MPa), Unannealed          | 275 °F                  | 135 °C                |                 |
| Electrical                             | Typical Value (English) | Typical Value (SI)    | Test Method     |
| Surface Resistivity                    | 100 to 100000 ohms/sq   | 100 to 100000 ohms/sq | Internal Method |
| Flammability                           | Typical Value (English) | Typical Value (SI)    | Test Method     |
| Flame Rating                           |                         |                       | UL 94           |
| 0.06 in (1.5 mm)                       | HB                      | HB                    |                 |
| 0.12 in (3.0 mm)                       | HB                      | HB                    |                 |

### 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 to 120 °C       |

| 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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