

**HiFill® PC GF10**

 Techmer Polymer Modifiers - *Polycarbonate*
**General Information**
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|                        |                                     |
|------------------------|-------------------------------------|
| Material Status        | • Commercial: Active                |
| Availability           | • North America                     |
| Filler / Reinforcement | • Glass Fiber, 10% Filler by Weight |
| Appearance             | • Colors Available                  |
| Forms                  | • Pellets                           |
| Processing Method      | • Injection Molding                 |

**Properties <sup>1</sup>**

|                                     | Nominal Value | Unit     | Test Method |
|-------------------------------------|---------------|----------|-------------|
| <b>Physical</b>                     |               |          |             |
| Density / Specific Gravity          | 1.44          |          | ASTM D792   |
| Molding Shrinkage - Flow (0.125 in) | 4.0E-3        | in/in    | ASTM D955   |
| Water Absorption (24 hr)            | 0.10          | %        | ASTM D570   |
| <b>Mechanical</b>                   |               |          |             |
| Tensile Strength (Break)            | 6600          | psi      | ASTM D638   |
| Tensile Elongation (Break)          | 1.8           | %        | ASTM D638   |
| Flexural Modulus                    | 850000        | psi      | ASTM D790   |
| Flexural Strength                   | 11400         | psi      | ASTM D790   |
| <b>Impact</b>                       |               |          |             |
| Notched Izod Impact                 | 0.45          | ft·lb/in | ASTM D256   |
| <b>Hardness</b>                     |               |          |             |
| Rockwell Hardness (R-Scale)         | 115           |          | ASTM D785   |
| <b>Thermal</b>                      |               |          |             |
| CLTE - Flow                         | 3.3E-5        | in/in/°F | ASTM D696   |
| <b>Electrical</b>                   |               |          |             |
| Volume Resistivity                  | 1.0E+13       | ohms·cm  | ASTM D257   |
| <b>Flammability</b>                 |               |          |             |
| Flame Rating (0.08 in)              | V-1           |          | UL 94       |

**Processing Information**

|                        | Nominal Value | Unit |
|------------------------|---------------|------|
| <b>Injection</b>       |               |      |
| Drying Temperature     | 250           | °F   |
| Drying Time            | 2.0 to 4.0    | hr   |
| Suggested Max Moisture | 0.10          | %    |
| Rear Temperature       | 575 to 600    | °F   |
| Middle Temperature     | 600 to 630    | °F   |
| Front Temperature      | 590 to 620    | °F   |
| Nozzle Temperature     | 590 to 620    | °F   |
| Processing (Melt) Temp | 580 to 620    | °F   |
| Mold Temperature       | 160 to 190    | °F   |
| Injection Rate         | Moderate      |      |
| Back Pressure          | 0.00 to 100   | psi  |

**Injection Notes**

Screw Speed: Medium  
 Recommendations for Molding and Tool Conditions: Well vented mold  
 Moisture Content, as received: Product is packaged at 0.2% or less.

