# HiFill® PC GF10 UV BK

**Techmer Polymer Modifiers - *Polycarbonate***

## General Information

| General | |
|---|---|
| Material Status | • Commercial: Active |
| Availability | • North America |
| Filler / Reinforcement | • Glass Fiber, 10% Filler by Weight |
| Additive | • UV Stabilizer |
| Appearance | • Black |
| Forms | • Pellets |
| Processing Method | • Injection Molding |

## Properties [1]

| Physical | Nominal Value | Unit | Test Method |
|---|---|---|---|
| Density / Specific Gravity | 1.25 | | ASTM D792 |
| Molding Shrinkage - Flow (0.125 in) | 3.5E-3 | in/in | ASTM D955 |
| Water Absorption (24 hr) | 0.12 | % | ASTM D570 |
| **Mechanical** | **Nominal Value** | **Unit** | **Test Method** |
| Tensile Strength (Break) | 9700 | psi | ASTM D638 |
| Tensile Elongation (Break) | 8.0 | % | ASTM D638 |
| Flexural Modulus | 500000 | psi | ASTM D790 |
| Flexural Strength | 16000 | psi | ASTM D790 |
| **Impact** | **Nominal Value** | **Unit** | **Test Method** |
| Notched Izod Impact (73°F, 0.125 in) | 2.0 | ft·lb/in | ASTM D256 |
| **Hardness** | **Nominal Value** | **Unit** | **Test Method** |
| Rockwell Hardness (R-Scale) | 124 | | ASTM D785 |
| **Thermal** | **Nominal Value** | **Unit** | **Test Method** |
| Deflection Temperature Under Load (66 psi, Unannealed) | 295 | °F | ASTM D648 |
| Deflection Temperature Under Load (264 psi, Unannealed) | 290 | °F | ASTM D648 |
| CLTE - Flow | 1.8E-5 | in/in/°F | ASTM D696 |
| **Electrical** | **Nominal Value** | **Unit** | **Test Method** |
| Volume Resistivity | 1.0E+17 | ohms·cm | ASTM D257 |
| Dielectric Strength (Method A (Short-Time)) | 450 | V/mil | ASTM D149 |
| **Flammability** | **Nominal Value** | **Unit** | **Test Method** |
| Flame Rating (0.06 in) | V-2 | | UL 94 |

## Processing Information

| Injection | Nominal Value | Unit |
|---|---|---|
| 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. |

**Notes**

[1] Typical properties: these are not to be construed as specifications.