

HiFill® PEEK CF30 A 002

 Techmer Polymer Modifiers - *Polyetheretherketone*
General Information
General

| | |
|------------------------|----------------------|
| Material Status | • Commercial: Active |
| Availability | • North America |
| Filler / Reinforcement | • Carbon Fiber |
| Appearance | • Black |
| Processing Method | • Injection Molding |

Properties ¹

| | Nominal Value | Unit | Test Method |
|---|------------------|----------|-------------|
| Physical | | | |
| Density / Specific Gravity | 1.41 | | ASTM D792 |
| Molding Shrinkage - Flow (0.125 in) | 1.0E-3 | in/in | ASTM D955 |
| Water Absorption (24 hr) | 0.14 | % | ASTM D570 |
| Mechanical | | | |
| Tensile Strength (Break) | 31000 | psi | ASTM D638 |
| Tensile Elongation (Break) | 3.5 | % | ASTM D638 |
| Flexural Modulus | 2.70E+6 | psi | ASTM D790 |
| Flexural Strength | 44000 | psi | ASTM D790 |
| Impact | | | |
| Notched Izod Impact (73°F, 0.125 in) | 1.7 | ft-lb/in | ASTM D256 |
| Hardness | | | |
| Rockwell Hardness (R-Scale) | 118 | | ASTM D785 |
| Thermal | | | |
| Deflection Temperature Under Load (264 psi, Unannealed) | 638 | °F | ASTM D648 |
| CLTE - Flow | 6.0E-6 | in/in/°F | ASTM D696 |
| Electrical | | | |
| Surface Resistivity | 1.0E+2 to 1.0E+3 | ohms | ASTM D257 |
| Volume Resistivity | 1.0E+2 to 1.0E+3 | ohms·cm | ASTM D257 |
| Shielding Effectiveness - 30 to 1000 MHz | 30 | dB | ASTM D4935 |
| Static Decay | < 0.500 | | FTMS 101B |
| Flammability | | | |
| Flame Rating (0.03 in) | V-0 | | UL 94 |

Processing Information

| | Nominal Value | Unit |
|------------------------|---------------|------|
| Injection | | |
| Drying Temperature | 300 | °F |
| Drying Time | 2.0 to 4.0 | hr |
| Rear Temperature | 680 to 730 | °F |
| Middle Temperature | 680 to 730 | °F |
| Front Temperature | 680 to 730 | °F |
| Processing (Melt) Temp | 680 to 720 | °F |
| Mold Temperature | 350 to 425 | °F |
| Back Pressure | 50.0 to 100 | psi |
| Screw Speed | 50 to 100 | rpm |

