

## HiFill® PBT GF20 BK007

Techmer Polymer Modifiers - *Polybutylene Terephthalate*

### General Information

| General                |                                                                                     |
|------------------------|-------------------------------------------------------------------------------------|
| Material Status        | <ul style="list-style-type: none"> <li>Commercial: Active</li> </ul>                |
| Availability           | <ul style="list-style-type: none"> <li>North America</li> </ul>                     |
| Filler / Reinforcement | <ul style="list-style-type: none"> <li>Glass Fiber, 20% Filler by Weight</li> </ul> |
| Appearance             | <ul style="list-style-type: none"> <li>Black</li> </ul>                             |
| Forms                  | <ul style="list-style-type: none"> <li>Pellets</li> </ul>                           |
| Processing Method      | <ul style="list-style-type: none"> <li>Injection Molding</li> </ul>                 |

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

| Physical                                                | Nominal Value | Unit     | Test Method |
|---------------------------------------------------------|---------------|----------|-------------|
| Density / Specific Gravity                              | 1.41          |          | ASTM D792   |
| Molding Shrinkage - Flow (0.125 in)                     | 6.0E-3        | in/in    | ASTM D955   |
| Water Absorption (24 hr)                                | 0.080         | %        | ASTM D570   |
| Mechanical                                              | Nominal Value | Unit     | Test Method |
| Tensile Strength (Break)                                | 15900         | psi      | ASTM D638   |
| Tensile Elongation (Break)                              | 5.0           | %        | ASTM D638   |
| Flexural Modulus                                        | 800000        | psi      | ASTM D790   |
| Flexural Strength                                       | 21000         | psi      | ASTM D790   |
| Impact                                                  | Nominal Value | Unit     | Test Method |
| Notched Izod Impact (73°F, 0.125 in)                    | 1.3           | ft-lb/in | ASTM D256   |
| Hardness                                                | Nominal Value | Unit     | Test Method |
| Rockwell Hardness (R-Scale)                             | 118           |          | ASTM D785   |
| Thermal                                                 | Nominal Value | Unit     | Test Method |
| Deflection Temperature Under Load (264 psi, Unannealed) | 410           | °F       | ASTM D648   |
| CLTE - Flow                                             | 1.9E-5        | in/in/°F | ASTM D696   |
| Electrical                                              | Nominal Value | Unit     | Test Method |
| Volume Resistivity                                      | 1.0E+16       | ohms·cm  | ASTM D257   |
| Dielectric Strength (Method A (Short-Time))             | 480           | V/mil    | ASTM D149   |
| Flammability                                            | Nominal Value | Unit     | Test Method |
| Flame Rating                                            | HB            |          | UL 94       |
| Additional Information                                  | Nominal Value | Unit     | Test Method |
| TPCI #                                                  | 6225111       |          |             |

### Processing Information

| Injection              | Nominal Value | Unit |
|------------------------|---------------|------|
| Drying Temperature     | 250           | °F   |
| Drying Time            | 4.0           | hr   |
| Rear Temperature       | 450 to 525    | °F   |
| Middle Temperature     | 450 to 525    | °F   |
| Front Temperature      | 450 to 525    | °F   |
| Processing (Melt) Temp | 450 to 475    | °F   |
| Mold Temperature       | 150 to 180    | °F   |
| Back Pressure          | 50.0 to 100   | psi  |
| Screw Speed            | 30 to 60      | rpm  |

