

**HiFill FR® PA6 GF25 FR-N IM BK002**

 Techmer Polymer Modifiers - *Polyamide 6*
**General Information**
**General**

|                        |  |
|------------------------|--|
| Material Status        | • Commercial: Active   |
| Availability           | • North America  |
| Filler / Reinforcement | • Glass Fiber, 25% Filler by Weight                          |
| Additive               | • Flame Retardant      • Impact Modifier                     |
| Features               | • Flame Retardant      • Halogen Free      • Impact Modified |
| Appearance             | • Black  |
| Processing Method      | • Injection Molding  |

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

|   | Nominal Value    | Unit     | Test Method |
|---|------------------|----------|-------------|
| <b>Physical</b>   |                  |          |             |
| Density / Specific Gravity                              | 1.35             |          | ASTM D792   |
| Molding Shrinkage - Flow (0.125 in)                     | 5.0E-3 to 7.0E-3 | in/in    | ASTM D955   |
| <b>Mechanical</b>                                       |                  |          |             |
| Tensile Strength (Yield)                                | 14000            | psi      | ASTM D638   |
| Tensile Strength (Break)                                | 13500            | psi      | ASTM D638   |
| Tensile Elongation (Break)                              | 3.0              | %        | ASTM D638   |
| Flexural Modulus  | 780000           | psi      | ASTM D790   |
| Flexural Strength                                       | 18000            | psi      | ASTM D790   |
| <b>Impact</b>   |                  |          |             |
| Notched Izod Impact (0.125 in)                          | 2.5              | ft·lb/in | ASTM D256   |
| <b>Thermal</b>  |                  |          |             |
| Deflection Temperature Under Load (264 psi, Unannealed) | 390              | °F       | ASTM D648   |
| <b>Flammability</b>                                     |                  |          |             |
| Flame Rating  |                  |          | UL 94       |
| 0.06 in   |                  | V-2      |             |
| 0.12 in   |                  | V-0      |             |

**Processing Information**

|                        | Nominal Value | Unit          |
|------------------------|---------------|---------------|
| <b>Injection</b>       |               |               |
| Drying Temperature     | 180           | °F            |
| Drying Time            | 2.0 to 3.0    | hr            |
| Rear Temperature       | 470 to 490    | °F            |
| Middle Temperature     | 480 to 500    | °F            |
| Front Temperature      | 490 to 510    | °F            |
| Nozzle Temperature     | 500 to 520    | °F            |
| Processing (Melt) Temp | 480 to 525    | °F            |
| Mold Temperature       | 100 to 200    | °F            |
| Injection Rate         |               | Slow          |
| Back Pressure          | 0.00 to 50.0  | psi           |
| Screw Speed            |               | Slow-Moderate |

