

**HiFill FR® PA6/6 GF25 FR**

 Techmer Polymer Modifiers - *Polyamide 66*
**General Information**
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|                        |                                     |
|------------------------|-------------------------------------|
| Material Status        | • Commercial: Active                |
| Availability           | • North America                     |
| Filler / Reinforcement | • Glass Fiber, 23% Filler by Weight |
| UL File Number         | • E157318                           |
| Appearance             | • Colors Available                  |
| Forms                  | • Pellets                           |
| Processing Method      | • Injection Molding                 |

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

| Physical  | Nominal Value | Unit     | Test Method |
|---|---------------|----------|-------------|
| Density / Specific Gravity                              | 1.45          |          | ASTM D792   |
| Molding Shrinkage - Flow (0.125 in)                     | 4.0E-3        | in/in    | ASTM D955   |
| Water Absorption (24 hr)                                | 0.70          | %        | ASTM D570   |
| Mechanical  | Nominal Value | Unit     | Test Method |
| Tensile Strength (Break)                                | 18200         | psi      | ASTM D638   |
| Tensile Elongation (Break)                              | 3.0           | %        | ASTM D638   |
| Flexural Modulus  | 1.01E+6       | psi      | ASTM D790   |
| Flexural Strength                                       | 28000         | psi      | ASTM D790   |
| Impact  | Nominal Value | Unit     | Test Method |
| Notched Izod Impact (73°F, 0.125 in)                    | 1.4           | ft-lb/in | ASTM D256   |
| Hardness  | Nominal Value | Unit     | Test Method |
| Rockwell Hardness (R-Scale)                             | 111           |          | ASTM D785   |
| Thermal   | Nominal Value | Unit     | Test Method |
| Deflection Temperature Under Load (264 psi, Unannealed) | 450           | °F       | ASTM D648   |
| CLTE - Flow   | 1.4E-5        | in/in/°F | ASTM D696   |
| Electrical  | Nominal Value | Unit     | Test Method |
| Surface Resistivity                                     | 1.0E+15       | ohms     | ASTM D257   |
| Volume Resistivity                                      | 1.0E+16       | ohms·cm  | ASTM D257   |
| Dielectric Strength (Method A (Short-Time))             | 440           | V/mil    | ASTM D149   |
| Flammability  | Nominal Value | Unit     | Test Method |
| Flame Rating (0.031 in, NC, BK, Colors)                 | V-0           |          | UL 94       |
| Additional Information                                  | Nominal Value | Unit     | Test Method |
| TPCI #  | 9085101       |          |             |

**Processing Information**

| Injection              | Nominal Value | Unit |
|------------------------|---------------|------|
| Drying Temperature     | 180           | °F   |
| Drying Time            | > 6.0         | hr   |
| Rear Temperature       | 490 to 530    | °F   |
| Middle Temperature     | 490 to 530    | °F   |
| Front Temperature      | 490 to 530    | °F   |
| Processing (Melt) Temp | 480 to 520    | °F   |
| Mold Temperature       | 150 to 200    | °F   |
| Back Pressure          | 50.0 to 100   | psi  |
| Screw Speed            | 30 to 60      | rpm  |

