

## HiFill FR® PA6/6 GF25 FR-N IM BK92479

Techmer Polymer Modifiers - Polyamide 66

### General

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

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

| Physical                                                | Nominal Value | Unit     | Test Method |
|---------------------------------------------------------|---------------|----------|-------------|
| Density / Specific Gravity                              | 1.36          |          | ASTM D792   |
| Molding Shrinkage - Flow (0.125 in)                     | 5.0E-3        | in/in    | ASTM D955   |
| Mechanical                                              | Nominal Value | Unit     | Test Method |
| Tensile Modulus                                         | 950000        | psi      | ASTM D638   |
| Tensile Strength (Yield)                                | 12000         | psi      | ASTM D638   |
| Tensile Elongation (Break)                              | 4.5           | %        | ASTM D638   |
| Flexural Modulus                                        | 700000        | psi      | ASTM D790   |
| Flexural Strength                                       | 21000         | psi      | ASTM D790   |
| Impact                                                  | Nominal Value | Unit     | Test Method |
| Notched Izod Impact (0.125 in)                          | 2.5           | ft-lb/in | ASTM D256   |
| Thermal                                                 | Nominal Value | Unit     | Test Method |
| Deflection Temperature Under Load (264 psi, Unannealed) | 430           | °F       | ASTM D648   |
| Flammability                                            | Nominal Value | Unit     | Test Method |
| Flame Rating                                            |               |          | UL 94       |
| 0.06 in                                                 | V-1           |          |             |
| 0.12 in                                                 | V-0           |          |             |

### Processing Information

| Injection              | Nominal Value | Unit |
|------------------------|---------------|------|
| Drying Temperature     | 180           | °F   |
| Drying Time            | 2.0 to 4.0    | hr   |
| Rear Temperature       | 500 to 550    | °F   |
| Middle Temperature     | 510 to 560    | °F   |
| Front Temperature      | 520 to 570    | °F   |
| Nozzle Temperature     | 530 to 580    | °F   |
| Processing (Melt) Temp | 525 to 575    | °F   |
| Mold Temperature       | 100 to 200    | °F   |
| Injection Rate         | Moderate      |      |
| Back Pressure          | 25.0 to 75.0  | psi  |
| Screw Speed            | Slow-Moderate |      |

