

## HiFill® PA6 GF15 HS L BK

Techmer Polymer Modifiers - *Polyamide 6*

### General Information

#### General

|                        |                                     |
|------------------------|-------------------------------------|
| Material Status        | • Commercial: Active                |
| Availability           | • North America                     |
| Filler / Reinforcement | • Glass Fiber, 15% Filler by Weight |
| Additive               | • Heat Stabilizer • Lubricant       |
| Features               | • Heat Stabilized • Lubricated      |
| Appearance             | • Black                             |
| Forms                  | • Pellets                           |
| Processing Method      | • Injection Molding                 |

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

| Physical                                                | Nominal Value | Unit     | Test Method |
|---------------------------------------------------------|---------------|----------|-------------|
| Density / Specific Gravity                              | 1.24          |          | ASTM D792   |
| Molding Shrinkage - Flow (0.125 in)                     | 5.5E-3        | in/in    | ASTM D955   |
| Water Absorption (24 hr)                                | 1.4           | %        | ASTM D570   |
| Mechanical                                              | Nominal Value | Unit     | Test Method |
| Tensile Strength (Yield)                                | 15500         | psi      | ASTM D638   |
| Tensile Elongation (Break)                              | 4.0           | %        | ASTM D638   |
| Flexural Modulus                                        | 450000        | psi      | ASTM D790   |
| Flexural Strength                                       | 22000         | psi      | ASTM D790   |
| Impact                                                  | Nominal Value | Unit     | Test Method |
| Notched Izod Impact (0.125 in)                          | 1.1           | ft-lb/in | ASTM D256   |
| Hardness                                                | Nominal Value | Unit     | Test Method |
| Rockwell Hardness (R-Scale)                             | 120           |          | ASTM D785   |
| Thermal                                                 | Nominal Value | Unit     | Test Method |
| Deflection Temperature Under Load (66 psi, Unannealed)  | 415           | °F       | ASTM D648   |
| Deflection Temperature Under Load (264 psi, Unannealed) | 385           | °F       | ASTM D648   |
| CLTE - Flow                                             | 2.4E-5        | in/in/°F | ASTM D696   |
| Electrical                                              | Nominal Value | Unit     | Test Method |
| Volume Resistivity                                      | 1.0E+15       | ohms·cm  | ASTM D257   |
| Dielectric Strength (Method A (Short-Time))             | 500           | V/mil    | ASTM D149   |
| Flammability                                            | Nominal Value | Unit     | Test Method |
| Flame Rating                                            | HB            |          | UL 94       |

### Processing Information

| Injection              | Nominal Value | Unit |
|------------------------|---------------|------|
| Drying Temperature     | 180           | °F   |
| Drying Time            | 4.0           | hr   |
| Rear Temperature       | 500 to 580    | °F   |
| Middle Temperature     | 500 to 580    | °F   |
| Front Temperature      | 500 to 580    | °F   |
| Processing (Melt) Temp | 470 to 520    | °F   |
| Mold Temperature       | 150 to 200    | °F   |
| Back Pressure          | 0.00 to 50.0  | psi  |
| Screw Speed            | 30 to 60      | rpm  |

