

## HiFill® PA6/6 GF6 HS BK

Techmer Polymer Modifiers - *Polyamide 66*

### General Information

#### General

|                        |                                      |
|------------------------|--------------------------------------|
| Material Status        | • Commercial: Active                 |
| Availability           | • North America                      |
| Filler / Reinforcement | • Glass Fiber, 6.0% 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                              | 1.14          |          | ASTM D792   |
| Molding Shrinkage - Flow (0.125 in)                     | 0.010         | in/in    | ASTM D955   |
| Water Absorption (24 hr)                                | 0.80          | %        | ASTM D570   |
| Mechanical                                              | Nominal Value | Unit     | Test Method |
| Tensile Strength (Yield)                                | 11800         | psi      | ASTM D638   |
| Tensile Elongation (Break)                              | 3.5           | %        | ASTM D638   |
| Flexural Modulus                                        | 530000        | psi      | ASTM D790   |
| Flexural Strength                                       | 17000         | psi      | ASTM D790   |
| Impact                                                  | Nominal Value | Unit     | Test Method |
| Notched Izod Impact (0.125 in)                          | 0.90          | ft-lb/in | ASTM D256   |
| Hardness                                                | Nominal Value | Unit     | Test Method |
| Rockwell Hardness (R-Scale)                             | 117           |          | ASTM D785   |
| Thermal                                                 | Nominal Value | Unit     | Test Method |
| Deflection Temperature Under Load (264 psi, Unannealed) | 400           | °F       | ASTM D648   |
| CLTE - Flow                                             | 3.0E-5        | in/in/°F | ASTM D696   |
| Electrical                                              | Nominal Value | Unit     | Test Method |
| Volume Resistivity                                      | 3.0E+14       | ohms·cm  | ASTM D257   |
| Dielectric Strength (Method A (Short-Time))             | 490           | 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            | 2.0 to 4.0    | hr   |
| Suggested Max Moisture | 0.12          | %    |
| Rear Temperature       | 540 to 560    | °F   |
| Middle Temperature     | 550 to 570    | °F   |
| Front Temperature      | 530 to 550    | °F   |
| Nozzle Temperature     | 540 to 560    | °F   |
| Processing (Melt) Temp | 540 to 580    | °F   |
| Mold Temperature       | 130 to 200    | °F   |
| Injection Rate         | Moderate-Fast |      |
| Back Pressure          | 50.0 to 100   | psi  |

#### Injection Notes



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Screw Speed: Medium

Recommendations for Molding and Tool Conditions: Well vented

Moisture Content, as received: Product is packaged at 0.2% or less.

Recommended Max Moisture: 0.12% down to 0.08%

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#### Notes

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<sup>1</sup> Typical properties: these are not to be construed as specifications.

