

## HiFill® PA6/6 GF/M40 B1 BK

Techmer Polymer Modifiers - *Polyamide 66*

### General Information

#### General

|                        |                                             |
|------------------------|---------------------------------------------|
| Material Status        | • Commercial: Active                        |
| Availability           | • North America                             |
| Filler / Reinforcement | • Glass Fiber\Mineral, 40% Filler by Weight |
| Additive               | • Lubricant                                 |
| Features               | • Lubricated                                |
| Appearance             | • Black                                     |
| Forms                  | • Pellets                                   |
| Processing Method      | • Injection Molding                         |

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

| Physical                                                | Nominal Value | Unit     | Test Method |
|---------------------------------------------------------|---------------|----------|-------------|
| Density / Specific Gravity                              | 1.42          |          | ASTM D792   |
| Molding Shrinkage - Flow (0.125 in)                     | 5.0E-3        | in/in    | ASTM D955   |
| Water Absorption (24 hr)                                | 0.50          | %        | ASTM D570   |
| Mechanical                                              | Nominal Value | Unit     | Test Method |
| Tensile Strength (Break)                                | 18000         | psi      | ASTM D638   |
| Tensile Elongation (Break)                              | 3.5           | %        | ASTM D638   |
| Flexural Modulus                                        | 1.00E+6       | psi      | ASTM D790   |
| Flexural Strength                                       | 25000         | psi      | ASTM D790   |
| Impact                                                  | Nominal Value | Unit     | Test Method |
| Notched Izod Impact (73°F, 0.125 in)                    | 1.0           | ft·lb/in | ASTM D256   |
| Unnotched Izod Impact (0.125 in)                        | 10            | ft·lb/in | ASTM D4812  |
| Hardness                                                | Nominal Value | Unit     | Test Method |
| Rockwell Hardness (R-Scale)                             | 121           |          | ASTM D785   |
| Thermal                                                 | Nominal Value | Unit     | Test Method |
| Deflection Temperature Under Load (66 psi, Unannealed)  | 485           | °F       | ASTM D648   |
| Deflection Temperature Under Load (264 psi, Unannealed) | 445           | °F       | ASTM D648   |
| CLTE - Flow                                             | 9.0E-6        | in/in/°F | ASTM D696   |
| Electrical                                              | Nominal Value | Unit     | Test Method |
| Volume Resistivity                                      | 8.0E+14       | ohms·cm  | ASTM D257   |
| Dielectric Strength (Method A (Short-Time))             | 450           | V/mil    | ASTM D149   |

### 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.

