

## HiFill® PA6/6 GB25 L BK

Techmer Polymer Modifiers - *Polyamide 66*

### General Information

| General                |                                    |
|------------------------|------------------------------------|
| Material Status        | • Commercial: Active               |
| Availability           | • North America                    |
| Filler / Reinforcement | • Glass Bead, 20% 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                              | 1.34          |          | ASTM D792   |
| Molding Shrinkage - Flow (0.125 in)                     | 0.018         | in/in    | ASTM D955   |
| Water Absorption (24 hr)                                | 0.90          | %        | ASTM D570   |
| Mechanical                                              | Nominal Value | Unit     | Test Method |
| Tensile Strength (Break)                                | 11000         | psi      | ASTM D638   |
| Tensile Elongation (Break)                              | 3.5           | %        | ASTM D638   |
| Flexural Modulus                                        | 620000        | psi      | ASTM D790   |
| Flexural Strength                                       | 17000         | psi      | ASTM D790   |
| Impact                                                  | Nominal Value | Unit     | Test Method |
| Notched Izod Impact (73°F, 0.125 in)                    | 0.60          | ft-lb/in | ASTM D256   |
| Unnotched Izod Impact (0.125 in)                        | 3.8           | ft-lb/in | ASTM D4812  |
| Hardness                                                | Nominal Value | Unit     | Test Method |
| Rockwell Hardness (R-Scale)                             | 119           |          | ASTM D785   |
| Thermal                                                 | Nominal Value | Unit     | Test Method |
| Deflection Temperature Under Load (66 psi, Unannealed)  | 450           | °F       | ASTM D648   |
| Deflection Temperature Under Load (264 psi, Unannealed) | 350           | °F       | ASTM D648   |
| Melting Temperature                                     | 491           | °F       |             |
| CLTE - Flow                                             | 3.3E-5        | in/in/°F | ASTM D696   |
| Electrical                                              | Nominal Value | Unit     | Test Method |
| Volume Resistivity                                      | 1.0E+14       | ohms·cm  | ASTM D257   |
| Dielectric Strength (Method A (Short-Time))             | 410           | V/mil    | ASTM D149   |
| Flammability                                            | Nominal Value | Unit     | Test Method |
| Flame Rating (0.06 in)                                  | 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 |
| <b>Injection Notes</b>                                              |                 |
| 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%                       |                 |

**Notes**

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

