

## HiFill® PA6/6 GF15 IM HS L

Techmer Polymer Modifiers - *Polyamide 66*

### General Information

#### General

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

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

| Physical                                                | Nominal Value | Unit     | Test Method |
|---------------------------------------------------------|---------------|----------|-------------|
| Density / Specific Gravity                              | 1.19          |          | ASTM D792   |
| Molding Shrinkage - Flow (0.125 in)                     | 0.016         | in/in    | ASTM D955   |
| Water Absorption (24 hr)                                | 0.90          | %        | ASTM D570   |
| Mechanical                                              | Nominal Value | Unit     | Test Method |
| Tensile Strength (Break)                                | 12200         | psi      | ASTM D638   |
| Tensile Elongation (Break)                              | 6.0           | %        | ASTM D638   |
| Flexural Modulus                                        | 525000        | psi      | ASTM D790   |
| Flexural Strength                                       | 16000         | psi      | ASTM D790   |
| Impact                                                  | Nominal Value | Unit     | Test Method |
| Notched Izod Impact                                     |               |          | ASTM D256   |
| -40°F, 0.125 in                                         | 2.0           | ft·lb/in |             |
| 73°F, 0.125 in                                          | 3.6           | ft·lb/in |             |
| Hardness                                                | Nominal Value | Unit     | Test Method |
| Rockwell Hardness (R-Scale)                             | 111           |          | 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) | 428           | °F       | ASTM D648   |
| CLTE - Flow                                             | 4.4E-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))             | 490           | 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 | 0.10          | %    |
| Rear Temperature       | 540 to 560    | °F   |
| Middle Temperature     | 550 to 570    | °F   |
| Front Temperature      | 530 to 550    | °F   |
| Nozzle Temperature     | 520 to 580    | °F   |
| Processing (Melt) Temp | 540 to 580    | °F   |
| Mold Temperature       | 175 to 220    | °F   |
| Injection Rate         | Slow-Moderate |      |



|                                                                     |                  |
|---------------------------------------------------------------------|------------------|
| Back Pressure                                                       | 0.00 to 50.0 psi |
| <b>Injection Notes</b>                                              |                  |
| Screw Speed: Slow                                                   |                  |
| Recommendations for Molding and Tool Conditions: Well vented mold   |                  |
| Moisture Content, as received: Product is packaged at 0.2% or less. |                  |
| <b>Notes</b>                                                        |                  |

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

