

## HiFill® PA6 IM L

Techmer Polymer Modifiers - *Polyamide 6*

### General Information

#### General

|                   |                                       |
|-------------------|---------------------------------------|
| Material Status   | • Commercial: Active                  |
| Availability      | • North America                       |
| Additive          | • Impact Modifier • Lubricant         |
| Features          | • 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                              | 1.06          |          | ASTM D792   |
| Molding Shrinkage - Flow (0.125 in)                     | 0.013         | in/in    | ASTM D955   |
| Water Absorption (24 hr)                                | 1.5           | %        | ASTM D570   |
| Mechanical                                              | Nominal Value | Unit     | Test Method |
| Tensile Strength (Yield)                                | 7300          | psi      | ASTM D638   |
| Tensile Elongation (Break)                              | 200           | %        | ASTM D638   |
| Flexural Modulus                                        | 250000        | psi      | ASTM D790   |
| Flexural Strength                                       | 9500          | psi      | ASTM D790   |
| Impact                                                  | Nominal Value | Unit     | Test Method |
| Notched Izod Impact (73°F, 0.125 in)                    | 16            | ft·lb/in | ASTM D256   |
| Unnotched Izod Impact (0.125 in)                        | No Break      |          | ASTM D4812  |
| Hardness                                                | Nominal Value | Unit     | Test Method |
| Rockwell Hardness (R-Scale)                             | 105           |          | ASTM D785   |
| Thermal                                                 | Nominal Value | Unit     | Test Method |
| Deflection Temperature Under Load (66 psi, Unannealed)  | 330           | °F       | ASTM D648   |
| Deflection Temperature Under Load (264 psi, Unannealed) | 125           | °F       | ASTM D648   |
| CLTE - Flow                                             | 5.5E-5        | in/in/°F | ASTM D696   |
| Electrical                                              | Nominal Value | Unit     | Test Method |
| Volume Resistivity                                      | 2.0E+13       | ohms·cm  | ASTM D257   |
| Dielectric Strength (Method A (Short-Time))             | 420           | 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       | 490 to 555    | °F   |
| Middle Temperature     | 490 to 555    | °F   |
| Front Temperature      | 490 to 555    | °F   |
| Processing (Melt) Temp | 460 to 530    | °F   |
| Mold Temperature       | 150 to 180    | °F   |
| Back Pressure          | 50.0 to 100   | psi  |
| Screw Speed            | 30 to 60      | rpm  |

