# HiFill® PA6/6 IM HS L BK

**Techmer Polymer Modifiers - *Polyamide 66***

## General Information

| General | | | |
|---|---|---|---|
| Material Status | • Commercial: Active | | |
| Availability | • North America | | |
| Additive | • Heat Stabilizer | • Impact Modifier | • Lubricant |
| Features | • Heat Stabilized | • High Impact Resistance | • Lubricated |
| Appearance | • Black | | |
| Forms | • Pellets | | |
| Processing Method | • Injection Molding | | |

## Properties [1]

| Physical | Nominal Value | Unit | Test Method |
|---|---|---|---|
| Density / Specific Gravity | 1.08 | | ASTM D792 |
| Molding Shrinkage - Flow (0.125 in) | 0.016 | in/in | ASTM D955 |
| Water Absorption (24 hr) | 1.3 | % | ASTM D570 |
| **Mechanical** | **Nominal Value** | **Unit** | **Test Method** |
| Tensile Strength (Break) | 7000 | psi | ASTM D638 |
| Tensile Elongation (Yield) | 48 | % | ASTM D638 |
| Flexural Modulus | 260000 | psi | ASTM D790 |
| Flexural Strength | 8600 | psi | ASTM D790 |
| **Impact** | **Nominal Value** | **Unit** | **Test Method** |
| Notched Izod Impact | | | ASTM D256 |
| -40°F, 0.125 in | 3.4 | ft·lb/in | |
| 73°F, 0.125 in | 15 | ft·lb/in | |
| Unnotched Izod Impact (0.125 in) | No Break | | ASTM D4812 |
| **Hardness** | **Nominal Value** | **Unit** | **Test Method** |
| Rockwell Hardness (R-Scale) | 110 | | ASTM D785 |
| **Thermal** | **Nominal Value** | **Unit** | **Test Method** |
| Deflection Temperature Under Load (66 psi, Unannealed) | 420 | °F | ASTM D648 |
| Deflection Temperature Under Load (264 psi, Unannealed) | 160 | °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)) | 440 | 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 | 2.0 to 4.0 | % |
| Rear Temperature | 510 to 580 | °F |
| Middle Temperature | 510 to 580 | °F |
| Front Temperature | 510 to 580 | °F |
| Processing (Melt) Temp | 500 to 540 | °F |
| Mold Temperature | 150 to 200 | °F |
| Back Pressure | 50.0 to 100 | psi |
| Screw Speed | 30 to 60 | rpm |