

HiFill FR® PA6/6 FR HS

 Techmer Polymer Modifiers - *Polyamide 66*
General Information
General

| | |
|-------------------|--|
| Material Status | • Commercial: Active |
| Availability | • North America |
| Additive | • Heat Stabilizer • Lubricant |
| Features | • Flame Retardant • Heat Stabilized • Halogen Free • Lubricated |
| Appearance | • Colors Available |
| Forms | • Pellets |
| Processing Method | • Injection Molding |

Properties ¹

| Physical | Nominal Value | Unit | Test Method |
|---|----------------------|-------------|--------------------|
| Density / Specific Gravity | 1.17 | | ASTM D792 |
| Molding Shrinkage - Flow (0.125 in) | 0.013 | in/in | ASTM D955 |
| Water Absorption (24 hr) | 0.80 | % | ASTM D570 |
| Mechanical | Nominal Value | Unit | Test Method |
| Tensile Strength (Yield) | 12000 | psi | ASTM D638 |
| Tensile Elongation (Yield) | 20 | % | ASTM D638 |
| Flexural Modulus | 400000 | psi | ASTM D790 |
| Flexural Strength | 16000 | psi | ASTM D790 |
| Impact | Nominal Value | Unit | Test Method |
| Notched Izod Impact (73°F, 0.125 in) | 0.60 | ft·lb/in | ASTM D256 |
| Hardness | Nominal Value | Unit | Test Method |
| Rockwell Hardness (R-Scale) | 115 | | ASTM D785 |
| Thermal | Nominal Value | Unit | Test Method |
| Deflection Temperature Under Load (264 psi, Unannealed) | 158 | °F | ASTM D648 |
| CLTE - Flow | 3.1E-5 | in/in/°F | ASTM D696 |
| Electrical | Nominal Value | Unit | Test Method |
| Surface Resistivity | 1.0E+13 | ohms | ASTM D257 |
| Volume Resistivity | 1.0E+15 | ohms·cm | ASTM D257 |
| Dielectric Strength (Method A (Short-Time)) | 690 | V/mil | ASTM D149 |
| Flammability | Nominal Value | Unit | Test Method |
| Flame Rating (0.06 in) | V-0 | | UL 94 |
| Additional Information | Nominal Value | Unit | Test Method |
| TPCI # | 9857101 | | |

Processing Information

| Injection | Nominal Value | Unit |
|------------------------|----------------------|-------------|
| Drying Temperature | 180 | °F |
| Drying Time | > 6.0 | hr |
| Rear Temperature | 490 to 530 | °F |
| Middle Temperature | 490 to 530 | °F |
| Front Temperature | 490 to 530 | °F |
| Processing (Melt) Temp | 480 to 520 | °F |
| Mold Temperature | 150 to 200 | °F |
| Back Pressure | 50.0 to 100 | psi |
| Screw Speed | 30 to 60 | rpm |

