

HiFill FR® PA6/6 FR 346 RD

 Techmer Polymer Modifiers - *Polyamide 66*
General Information

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

Properties ¹

| Physical | Nominal Value | Unit | Test Method |
|---|----------------------|-------------|--------------------|
| Density / Specific Gravity | 1.22 | | 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 (Yield) | 9000 | psi | ASTM D638 |
| Tensile Elongation (Break) | 60 | % | ASTM D638 |
| Flexural Modulus | 37000 | psi | ASTM D790 |
| Flexural Strength | 13200 | psi | ASTM D790 |
| Impact | Nominal Value | Unit | Test Method |
| Notched Izod Impact | 1.3 | 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 (66 psi, Unannealed) | 400 | °F | ASTM D648 |
| Deflection Temperature Under Load (264 psi, Unannealed) | 145 | °F | ASTM D648 |
| CLTE - Flow | 5.1E-5 | in/in/°F | ASTM D696 |
| Electrical | Nominal Value | Unit | Test Method |
| Surface Resistivity | 1.0E+15 | ohms | ASTM D257 |
| Volume Resistivity | 1.0E+14 | ohms·cm | ASTM D257 |
| Dielectric Strength (Method A (Short-Time)) | 690 | V/mil | ASTM D149 |
| Flammability | Nominal Value | Unit | Test Method |
| Flame Rating | | | UL 94 |
| 0.031 in | | V-0 | |
| 0.12 in | | 5VA | |

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 |

