

HiFill® TPU/I GF30

Techmer Polymer Modifiers - *Thermoplastic Polyurethane Elastomer (Polyether)*

General

| | |
|------------------------|----------------------|
| Material Status | • Commercial: Active |
| Availability | • North America |
| Filler / Reinforcement | • Glass Fiber |
| Appearance | • Colors Available |
| Processing Method | • Injection Molding |

Properties ¹

| Physical | Nominal Value | Unit | Test Method |
|---------------------------------------------------------|---------------|----------|-------------|
| Density / Specific Gravity | 1.43 | | ASTM D792 |
| Molding Shrinkage - Flow (0.125 in) | 5.0E-3 | in/in | ASTM D955 |
| Water Absorption (24 hr) | 0.20 | % | ASTM D570 |
| Mechanical | Nominal Value | Unit | Test Method |
| Tensile Strength (Break) | 19500 | psi | ASTM D638 |
| Tensile Elongation (Break) | > 10 | % | ASTM D638 |
| Flexural Modulus | 900000 | psi | ASTM D790 |
| Flexural Strength | 26000 | psi | ASTM D790 |
| Impact | Nominal Value | Unit | Test Method |
| Notched Izod Impact (73°F, 0.125 in) | 2.8 | ft·lb/in | ASTM D256 |
| Thermal | Nominal Value | Unit | Test Method |
| Deflection Temperature Under Load (66 psi, Unannealed) | 335 | °F | ASTM D648 |
| Deflection Temperature Under Load (264 psi, Unannealed) | 290 | °F | ASTM D648 |
| CLTE - Flow | 4.0E-6 | in/in/°F | ASTM D696 |
| Electrical | Nominal Value | Unit | Test Method |
| Volume Resistivity | 1.0E+15 | ohms·cm | ASTM D257 |
| Dielectric Strength (Method A (Short-Time)) | 400 | V/mil | ASTM D149 |

