

HiFill® PA6 G/M40 L UV

 Techmer Polymer Modifiers - *Polyamide 6*
General Information
General

| | |
|------------------------|---|
| Material Status | • Commercial: Active |
| Availability | • North America |
| Filler / Reinforcement | • Glass Fiber\Mineral, 40% Filler by Weight |
| Additive | • Lubricant • UV Stabilizer |
| Features | • Lubricated • UV Resistant |
| Appearance | • Colors Available |
| Forms | • Pellets |
| Processing Method | • Injection Molding |

Properties ¹

| Physical | Nominal Value | Unit | Test Method |
|---|----------------------|---|--------------------|
| Density / Specific Gravity | 1.50 | | ASTM D792 |
| Molding Shrinkage - Flow (0.125 in) | 2.0E-3 | in/in | ASTM D955 |
| Water Absorption (24 hr) | 0.90 | % | ASTM D570 |
| Mechanical | Nominal Value | Unit | Test Method |
| Tensile Strength (Break) | 19000 | psi | ASTM D638 |
| Tensile Elongation (Break) | 4.0 | % | ASTM D638 |
| Flexural Modulus | 1.30E+6 | psi | ASTM D790 |
| Flexural Strength | 30000 | psi | ASTM D790 |
| Coefficient of Friction | | | ASTM D1894 |
| vs. Steel - Dynamic | 0.31 | | |
| vs. Steel - Static | 0.24 | | |
| Wear Factor | 85 | 10 ⁻¹⁰ in ³ ·min/ft·lb·hr | ASTM D3702 |
| Impact | Nominal Value | Unit | Test Method |
| Notched Izod Impact (73°F, 0.125 in) | 1.3 | ft·lb/in | ASTM D256 |
| Hardness | Nominal Value | Unit | Test Method |
| Rockwell Hardness (R-Scale) | 119 | | ASTM D785 |
| Thermal | Nominal Value | Unit | Test Method |
| Deflection Temperature Under Load (66 psi, Unannealed) | 410 | °F | ASTM D648 |
| Deflection Temperature Under Load (264 psi, Unannealed) | 400 | °F | ASTM D648 |
| CLTE - Flow | 9.0E-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 |
| Additional Information | Nominal Value | Unit | Test Method |
| TPCI # | 6024102 | | |

Processing Information

| Injection | Nominal Value | Unit |
|------------------------|----------------------|-------------|
| Drying Temperature | 180 | °F |
| Drying Time | 4.0 | hr |
| Rear Temperature | 500 to 580 | °F |
| Middle Temperature | 500 to 580 | °F |
| Front Temperature | 500 to 580 | °F |
| Processing (Melt) Temp | 470 to 520 | °F |
| Mold Temperature | 150 to 200 | °F |
| Back Pressure | 0.00 to 50.0 | psi |



Notes

¹ Typical properties: these are not to be construed as specifications.

