

Plaslube® PEI GF30 TL15 BK

 Techmer Polymer Modifiers - *Polyetherimide*
General Information
General

| | |
|------------------------|-------------------------------------|
| Material Status | • Commercial: Active |
| Availability | • North America |
| Filler / Reinforcement | • Glass Fiber, 30% Filler by Weight |
| Additive | • PTFE Lubricant: 15% |
| Features | • Lubricated |
| Appearance | • Black |
| Forms | • Pellets |
| Processing Method | • Injection Molding |

Properties ¹

| Physical | Nominal Value | Unit | Test Method |
|---|---------------|---|-------------|
| Density / Specific Gravity | 1.67 | | ASTM D792 |
| Molding Shrinkage - Flow (0.125 in) | 3.0E-3 | in/in | ASTM D955 |
| Water Absorption (24 hr) | 0.29 | % | ASTM D570 |
| Mechanical | Nominal Value | Unit | Test Method |
| Tensile Strength (Break) | 12400 | psi | ASTM D638 |
| Tensile Elongation (Break) | 3.0 | % | ASTM D638 |
| Flexural Modulus | 1.20E+6 | psi | ASTM D790 |
| Flexural Strength | 20000 | psi | ASTM D790 |
| Coefficient of Friction | | | ASTM D1894 |
| vs. Steel - Dynamic | 0.19 | | |
| vs. Steel - Static | 0.20 | | |
| Wear Factor | 35 | 10 ⁻¹⁰ in ³ ·min/ft·lb·hr | ASTM D3702 |
| Impact | Nominal Value | Unit | Test Method |
| Notched Izod Impact (73°F, 0.125 in) | 1.1 | ft·lb/in | ASTM D256 |
| Unnotched Izod Impact (0.125 in) | 9.0 | ft·lb/in | ASTM D4812 |
| Hardness | Nominal Value | Unit | Test Method |
| Rockwell Hardness (R-Scale) | 121 | | ASTM D785 |
| Thermal | Nominal Value | Unit | Test Method |
| Deflection Temperature Under Load (66 psi, Unannealed) | 415 | °F | ASTM D648 |
| Deflection Temperature Under Load (264 psi, Unannealed) | 413 | °F | ASTM D648 |
| CLTE - Flow | 9.0E-6 | in/in/°F | ASTM D696 |
| Electrical | Nominal Value | Unit | Test Method |
| Volume Resistivity | 1.0E+16 | ohms·cm | ASTM D257 |
| Dielectric Strength (Method A (Short-Time)) | 630 | V/mil | ASTM D149 |

Processing Information

| Injection | Nominal Value | Unit |
|------------------------|---------------|------|
| Drying Temperature | 285 | °F |
| Drying Time | 3.0 | hr |
| Rear Temperature | 675 to 735 | °F |
| Middle Temperature | 675 to 735 | °F |
| Front Temperature | 675 to 735 | °F |
| Processing (Melt) Temp | 670 to 730 | °F |
| Mold Temperature | 275 to 325 | °F |
| Back Pressure | 50.0 to 100 | psi |
| Screw Speed | 50 to 100 | rpm |

