

Plaslube® PEEK CF10 GL10 TL10 A HF

 Techmer Polymer Modifiers - *Polyetheretherketone*
General Information

| General | |
|------------------------|--------------------------|
| Material Status | • Commercial: Active |
| Availability | • North America |
| Filler / Reinforcement | • Carbon\Graphite\PTFE |
| Additive | • Lubricant |
| Features | • High Flow • Lubricated |
| Appearance | • Black |
| Processing Method | • Injection Molding |

Properties ¹

| Physical | Nominal Value | Unit | Test Method |
|---|------------------|--|-------------|
| Density / Specific Gravity | 1.44 | | ASTM D792 |
| Molding Shrinkage - Flow (0.125 in) | 9.0E-3 | in/in | ASTM D955 |
| Water Absorption (24 hr) | 0.15 | % | ASTM D570 |
| Mechanical | Nominal Value | Unit | Test Method |
| Tensile Strength (Break) | 20200 | psi | ASTM D638 |
| Tensile Elongation (Break) | 3.0 | % | ASTM D638 |
| Flexural Modulus | 1.40E+6 | psi | ASTM D790 |
| Flexural Strength | 41000 | psi | ASTM D790 |
| Coefficient of Friction | | | ASTM D1894 |
| vs. Steel - Dynamic | 0.22 | | |
| vs. Steel - Static | 0.19 | | |
| Wear Factor | 28 | 10 ⁻⁴ -10 in ³ ·min/ft·lb·hr | |
| Limiting Pressure Velocity | | | ASTM D3702 |
| 10 fpm | 40000.0 | psi·fpm | |
| 100 fpm | 45000.0 | psi·fpm | |
| 1000 fpm | 28000.0 | psi·fpm | |
| Impact | Nominal Value | Unit | Test Method |
| Notched Izod Impact (73°F, 0.125 in) | 1.7 | ft·lb/in | ASTM D256 |
| Hardness | Nominal Value | Unit | Test Method |
| Rockwell Hardness (R-Scale) | 116 | | ASTM D785 |
| Thermal | Nominal Value | Unit | Test Method |
| Deflection Temperature Under Load (66 psi, Unannealed) | > 600 | °F | ASTM D648 |
| Deflection Temperature Under Load (264 psi, Unannealed) | 530 | °F | ASTM D648 |
| CLTE - Flow | 1.2E-5 | in/in/°F | ASTM D696 |
| Electrical | Nominal Value | Unit | Test Method |
| Volume Resistivity | 1.0E+4 to 1.0E+6 | ohms·cm | ASTM D257 |

Processing Information

| Injection | Nominal Value | Unit |
|------------------------|---------------|------|
| Drying Temperature | 300 | °F |
| Drying Time | 2.0 to 4.0 | hr |
| Rear Temperature | 680 to 730 | °F |
| Middle Temperature | 680 to 730 | °F |
| Front Temperature | 680 to 730 | °F |
| Processing (Melt) Temp | 680 to 720 | °F |
| Mold Temperature | 350 to 425 | °F |
| Back Pressure | 50.0 to 100 | psi |
| Screw Speed | 50 to 100 | rpm |

