

Electrafil® TPU/E 06001

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

General

| | |
|------------------------|----------------------|
| Material Status | • Commercial: Active |
| Availability | • North America |
| Filler / Reinforcement | • Carbon Fiber |
| Features | • Conductive |
| Appearance | • Black |
| Forms | • Pellets |
| Processing Method | • Injection Molding |

Properties ¹

| Physical | Nominal Value | Unit | Test Method |
|-------------------------------------|---------------|---------|-------------|
| Density / Specific Gravity | 1.29 | | ASTM D792 |
| Molding Shrinkage - Flow (0.125 in) | 3.0E-3 | in/in | ASTM D955 |
| Water Absorption (24 hr) | 0.20 | % | ASTM D570 |
| Mechanical | Nominal Value | Unit | Test Method |
| Tensile Strength (Yield) | 9800 | psi | ASTM D638 |
| Tensile Elongation (Break) | 100 | % | ASTM D638 |
| Flexural Modulus | 80000 | psi | ASTM D790 |
| Elastomers | Nominal Value | Unit | Test Method |
| Tear Strength | 200 | lbf/in | ASTM D624 |
| Hardness | Nominal Value | Unit | Test Method |
| Durometer Hardness (Shore A) | 88 | | ASTM D2240 |
| Thermal | Nominal Value | Unit | Test Method |
| Vicat Softening Temperature | 220 | °F | ASTM D1525 |
| Electrical | Nominal Value | Unit | Test Method |
| Surface Resistivity | 10 to 1.0E+3 | ohms | ASTM D257 |
| Volume Resistivity | 10 to 1.0E+3 | ohms·cm | ASTM D257 |

