

InLube® PCCF10TF15HF

Americhem - Polycarbonate

General Information

Product Description

10% CARBON FIBER REINFORCED, 15% PTFE LUBRICATED, HIGH FLOW, POLYCARBONATE

General

| | | | |
|------------------------|---|--|--|
| Material Status | • Commercial: Active | | |
| Availability | • Africa & Middle East • Asia Pacific | • Europe • Latin America | • North America |
| Filler / Reinforcement | • Carbon Fiber, 10% Filler by Weight | | |
| Additive | • PTFE Lubricant: 15% | | |
| Features | • Chemical Resistant • Filled • Good Dimensional Stability • Good Mold Release | • High Flow • High Stiffness • High Strength • Low Friction | • Lubricated • Wear Resistant |
| Uses | • Automotive Applications • Closures • Connectors • Consumer Applications | • Electrical/Electronic Applications • Engineering Parts • Household Goods • Housings | • Industrial Applications • Industrial Parts • Office Automation Equipment |
| Forms | • Pellets | | |
| Processing Method | • Injection Molding | | |

 Properties ¹

| | Nominal Value | Unit | Test Method |
|---|------------------|----------|-------------|
| Physical | | | |
| Density / Specific Gravity | 1.33 | | ASTM D792 |
| Molding Shrinkage - Flow | 1.0E-3 to 2.0E-3 | in/in | ASTM D955 |
| Water Absorption (24 hr) | 0.10 | % | ASTM D570 |
| Mechanical | | | |
| Tensile Modulus | 1.00E+6 | psi | ASTM D638 |
| Tensile Strength | 15000 | psi | ASTM D638 |
| Tensile Elongation (Break) | 2.5 to 3.5 | % | ASTM D638 |
| Flexural Modulus | 1.00E+6 | psi | ASTM D790 |
| Flexural Strength | 23000 | psi | ASTM D790 |
| Impact | | | |
| Notched Izod Impact (0.125 in) | 1.8 | ft-lb/in | ASTM D256 |
| Unnotched Izod Impact (0.125 in) | 10 | ft-lb/in | ASTM D4812 |
| Thermal | | | |
| Deflection Temperature Under Load (264 psi, Unannealed) | 290 | °F | ASTM D648 |
| Electrical | | | |
| Volume Resistivity | < 1.0E+5 | ohms·cm | ASTM D257 |

Processing Information

| | Nominal Value | Unit |
|------------------------|---------------|------|
| Injection | | |
| Drying Temperature | 250 | °F |
| Drying Time | 3.0 to 4.0 | hr |
| Processing (Melt) Temp | 540 to 620 | °F |
| Mold Temperature | 200 | °F |
| Back Pressure | 50.0 to 100 | psi |
| Screw Speed | 40 to 70 | rpm |

