

InLube® PBTGF30TF15

Americhem - Polybutylene Terephthalate

General Information

Product Description

30% GLASS FIBER REINFORCED 15% PTFE LUBRICATED PBT

General

| | |
|------------------------|---|
| Material Status | • Commercial: Active |
| Availability | • Africa & Middle East • Asia Pacific • Europe • Latin America • North America |
| Filler / Reinforcement | • Glass Fiber, 30% Filler by Weight |
| Additive | • PTFE Lubricant: 15% |
| Features | • Chemical Resistant • Filled • Good Dimensional Stability • Good Mold Release • High Stiffness • High Strength • Low Friction • Lubricated • Wear Resistant |
| Uses | • Automotive Applications • Battery Cases • Connectors • Consumer Applications • Electrical/Electronic Applications • Engineering Parts • Household Goods • Industrial Applications • Industrial Parts • Semiconductor Applications |
| Forms | • Pellets |
| Processing Method | • Injection Molding |

 Properties ¹

| Physical | Nominal Value | Unit | Test Method |
|---|------------------|---------------------|-------------|
| Density / Specific Gravity | 1.64 | | ASTM D792 |
| Specific Volume | 16.9 | in ³ /lb | |
| Molding Shrinkage - Flow | 1.0E-3 to 2.0E-3 | in/in | ASTM D955 |
| Water Absorption (24 hr) | 0.040 | % | ASTM D570 |
| Mechanical | Nominal Value | Unit | Test Method |
| Tensile Strength | 15500 | psi | ASTM D638 |
| Tensile Elongation (Yield) | 2.0 to 4.0 | % | ASTM D638 |
| Flexural Modulus | 1.30E+6 | psi | ASTM D790 |
| Flexural Strength | 23000 | psi | ASTM D790 |
| Impact | Nominal Value | Unit | Test Method |
| Notched Izod Impact (0.125 in) | 1.5 | ft-lb/in | ASTM D256 |
| Unnotched Izod Impact (0.125 in) | 14 | ft-lb/in | ASTM D4812 |
| Thermal | Nominal Value | Unit | Test Method |
| Deflection Temperature Under Load (264 psi, Unannealed) | 425 | °F | ASTM D648 |
| CLTE - Flow | 1.3E-5 | in/in/°F | ASTM D696 |
| Electrical | Nominal Value | Unit | Test Method |
| Surface Resistivity | 1.0E+17 | ohms | |
| Flammability | Nominal Value | Unit | Test Method |
| Flame Rating (0.06 in) | HB | | UL 94 |

Processing Information

| Injection | Nominal Value | Unit |
|------------------------|------------------|------|
| Drying Temperature | 230 | °F |
| Drying Time | 4.0 | hr |
| Processing (Melt) Temp | 430 to 500 | °F |
| Mold Temperature | 225 | °F |
| Back Pressure | 50.0 to 100 | psi |
| Screw Speed | 40 to 70 | rpm |
| Vent Depth | 1.5E-3 to 3.0E-3 | in |

