

InLube® PA66CF30TF10HS

Americhem - Polyamide 66

General Information
Product Description

30% CARBON FIBER REINFORCED, 10% PTFE LUBRICATED, HEAT STABILIZED NYLON 6/6

General

| | |
|------------------------|---|
| Material Status | • Commercial: Active |
| Availability | • Africa & Middle East • Europe • North America • Asia Pacific • Latin America |
| Filler / Reinforcement | • Carbon Fiber, 30% Filler by Weight |
| Additive | • Heat Stabilizer • PTFE Lubricant: 10% |
| Features | • Chemical Resistant • Heat Stabilized • Lubricated • Filled • High Stiffness • Wear Resistant • Good Dimensional Stability • High Strength • Good Mold Release • Low Friction |
| Uses | • Closures • Engineering Parts • Industrial Parts • Consumer Applications • Household Goods • Office Automation Equipment • Electrical/Electronic Applications • Industrial Applications • Outdoor Applications |
| Forms | • Pellets |
| Processing Method | • Injection Molding |

Properties ¹

| Physical | Nominal Value | Unit | Test Method |
|---|------------------|----------|-------------|
| Density / Specific Gravity | 1.35 | | ASTM D792 |
| Molding Shrinkage - Flow | 2.0E-3 to 4.0E-3 | in/in | ASTM D955 |
| Water Absorption (24 hr) | 0.50 | % | ASTM D570 |
| Mechanical | Nominal Value | Unit | Test Method |
| Tensile Modulus | 3.00E+6 | psi | ASTM D638 |
| Tensile Strength | 31000 | psi | ASTM D638 |
| Tensile Elongation (Break) | 2.0 | % | ASTM D638 |
| Flexural Modulus | 2.80E+6 | psi | ASTM D790 |
| Flexural Strength | 48000 | psi | ASTM D790 |
| Impact | Nominal Value | Unit | Test Method |
| Notched Izod Impact (0.125 in) | 1.6 | ft-lb/in | ASTM D256 |
| Thermal | Nominal Value | Unit | Test Method |
| Deflection Temperature Under Load (264 psi, Unannealed) | 490 | °F | ASTM D648 |
| Electrical | Nominal Value | Unit | Test Method |
| Surface Resistivity | 1.0E+3 to 1.0E+5 | ohms | |
| Flammability | Nominal Value | Unit | Test Method |
| Flame Rating (0.06 in) | HB | | UL 94 |

Processing Information

| Injection | Nominal Value | Unit |
|------------------------|---------------|------|
| Drying Temperature | 175 | °F |
| Drying Time | 4.0 | hr |
| Suggested Max Moisture | 0.20 | % |
| Processing (Melt) Temp | 530 to 575 | °F |
| Mold Temperature | 200 | °F |
| Back Pressure | 50.0 to 100 | psi |
| Screw Speed | 40 to 70 | rpm |

