

InLube® PA6GF30MOS2

Americhem - Polyamide 6

General Information
Product Description

30% GLASS FIBER REINFORCED 2% MoS2 LUBRICATED NYLON 6

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 | • Molybdenum Disulfide Lubricant: 2% |
| Features | • Filled • Good Dimensional Stability • High Stiffness • High Strength • Low Friction • Lubricated |
| Uses | • Closures • Consumer Applications • Electrical/Electronic Applications • Engineering Parts • Household Goods • Industrial Applications • Industrial Parts • Office Automation Equipment • Outdoor Applications • Window & Door Components |
| Forms | • Pellets |
| Processing Method | • Injection Molding |

Properties ¹

| Physical | Nominal Value | Unit | Test Method |
|---|------------------|---------------------|-------------|
| Density / Specific Gravity | 1.40 | | ASTM D792 |
| Specific Volume | 19.8 | in ³ /lb | |
| Molding Shrinkage - Flow | 3.0E-3 to 4.0E-3 | in/in | ASTM D955 |
| Water Absorption (24 hr) | 0.70 | % | ASTM D570 |
| Mechanical | Nominal Value | Unit | Test Method |
| Tensile Strength | 23500 | psi | ASTM D638 |
| Tensile Elongation (Yield) | 2.0 to 4.0 | % | ASTM D638 |
| Flexural Modulus | 1.00E+6 | psi | ASTM D790 |
| Shear Strength | 12000 | psi | ASTM D732 |
| Impact | Nominal Value | Unit | Test Method |
| Notched Izod Impact (0.125 in) | 1.7 | ft·lb/in | ASTM D256 |
| Unnotched Izod Impact (0.125 in) | 19 | ft·lb/in | ASTM D4812 |
| Thermal | Nominal Value | Unit | Test Method |
| Deflection Temperature Under Load (264 psi, Unannealed) | 410 | °F | ASTM D648 |
| CLTE - Flow | 1.9E-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 | 175 | °F |
| Drying Time | 4.0 | hr |
| Processing (Melt) Temp | 480 to 550 | °F |
| Mold Temperature | 200 | °F |
| Back Pressure | 50.0 to 100 | psi |
| Screw Speed | 40 to 70 | rpm |
| Vent Depth | 5.0E-4 to 1.0E-3 | in |

