

InLube® PA610GF50SI2MD

Americhem - Polyamide 610

General Information
Product Description

50% GLASS FIBER REINFORCED, 2% SILICONE LUBRICATED NYLON 610

General

| | | | |
|------------------------|---|---|---|
| Material Status | • Commercial: Active | | |
| Availability | • Africa & Middle East • Asia Pacific | • Europe • Latin America | • North America |
| Filler / Reinforcement | • Glass Fiber, 50% Filler by Weight | | |
| Additive | • Silicone Lubricant: 2% | | |
| Features | • Ethylene Oxide Sterilizable • Filled • Good Dimensional Stability | • High Stiffness • High Strength • Low Friction | • Lubricated |
| Uses | • Closures • Electrical/Electronic Applications | • Engineering Parts • Industrial Parts | • Medical/Healthcare Applications • Surgical Instruments |
| Forms | • Pellets | | |
| Processing Method | • Injection Molding | | |

Properties ¹

| Physical | Nominal Value | Unit | Test Method |
|---|------------------|----------|-------------|
| Density / Specific Gravity | 1.50 | | ASTM D792 |
| Molding Shrinkage - Flow | 1.0E-3 to 3.0E-3 | in/in | ASTM D955 |
| Mechanical | Nominal Value | Unit | Test Method |
| Tensile Modulus | 1.70E+6 | psi | ASTM D638 |
| Tensile Strength | 23000 | psi | ASTM D638 |
| Tensile Elongation (Yield) | 3.0 to 5.0 | % | ASTM D638 |
| Flexural Modulus | 1.60E+6 | psi | ASTM D790 |
| Flexural Strength | 31000 | psi | ASTM D790 |
| Impact | Nominal Value | Unit | Test Method |
| Notched Izod Impact (0.125 in) | 3.0 | ft·lb/in | ASTM D256 |
| Thermal | Nominal Value | Unit | Test Method |
| Deflection Temperature Under Load (264 psi, Unannealed) | 420 | °F | ASTM D648 |

Processing Information

| Injection | Nominal Value | Unit |
|------------------------|---------------|------|
| Drying Temperature | 175 | °F |
| Drying Time | 2.0 to 4.0 | hr |
| Processing (Melt) Temp | 510 to 530 | °F |
| Mold Temperature | 180 to 200 | °F |
| Back Pressure | 50.0 to 100 | psi |
| Screw Speed | 40 to 70 | rpm |

Notes
¹ Typical properties: these are not to be construed as specifications.
