# InLube® PCGF30TF8HFMRMD

## Americhem - *Polycarbonate*

## General Information

### Product Description

InLube® PCGF30TF8HFMRMD is a 30% glass fiber reinforced, 8% PTFE lubricated, high flow, mold release polycarbonate. InLube® PCGF30TF8HFMRMD offers great dimensional stability, creep resistance, and high impact strength. This is a LOCKED MEDICAL FORMULATION.

### General

| | |
|---|---|
| Material Status | • Commercial: Active |
| Availability | • Africa & Middle East    • Europe    • North America<br>• Asia Pacific    • Latin America |
| Filler / Reinforcement | • Glass Fiber, 30% Filler by Weight |
| Additive | • Mold Release    • PTFE Lubricant: 8% |
| Features | • Autoclave Sterilizable    • Good Mold Release    • Lubricated<br>• Chemical Resistant    • Heat Sterilizable    • Radiation Sterilizable<br>• E-beam Sterilizable    • High Flow    • Steam Sterilizable<br>• Ethylene Oxide Sterilizable    • High Stiffness    • Wear Resistant<br>• Filled    • High Strength<br>• Good Dimensional Stability    • Low Friction |
| Uses | • Closures    • Engineering Parts    • Medical/Healthcare Applications<br>• Connectors    • Housings<br>• Electrical/Electronic Applications    • Industrial Parts    • 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 | 1.30E+6 | psi | ASTM D638 |
| Tensile Strength | 15000 | psi | ASTM D638 |
| Tensile Elongation (Yield) | 2.0 to 4.0 | % | ASTM D638 |
| Flexural Modulus | 1.31E+6 | psi | ASTM D790 |
| Flexural Strength | 24000 | psi | ASTM D790 |

| Impact | Nominal Value | Unit | Test Method |
|---|---|---|---|
| Notched Izod Impact (0.125 in) | 1.7 | ft·lb/in | ASTM D256 |

| Thermal | Nominal Value | Unit | Test Method |
|---|---|---|---|
| Deflection Temperature Under Load (264 psi, Unannealed) | 300 | °F | ASTM D648 |

## Processing Information

| Injection | Nominal Value | Unit |
|---|---|---|
| Drying Temperature | 250 | °F |
| Drying Time | 4.0 | hr |
| Suggested Max Moisture | 0.020 | % |
| Processing (Melt) Temp | 560 to 600 | °F |
| Mold Temperature | 200 | °F |
| Back Pressure | 50.0 to 100 | psi |
| Screw Speed | 40 to 70 | rpm |
| Vent Depth | 1.5E-3 to 3.0E-3 | in |