

**InStruc® PBTGF30MD**
*Americhem - Polybutylene Terephthalate*
**General Information**
**Product Description**

30% GLASS FIBER REINFORCED PBT (LOCKED MEDICAL FORMULA)

**General**

Material Status	• Commercial: Active
Availability	<ul style="list-style-type: none"> <li>• Africa &amp; Middle East</li> <li>• Asia Pacific</li> <li>• Europe</li> <li>• Latin America</li> <li>• North America</li> </ul>
Filler / Reinforcement	• Glass Fiber, 30% Filler by Weight
Features	<ul style="list-style-type: none"> <li>• E-beam Sterilizable</li> <li>• Ethylene Oxide Sterilizable</li> <li>• Filled</li> <li>• Good Dimensional Stability</li> <li>• High Stiffness</li> <li>• High Strength</li> <li>• Radiation Sterilizable</li> <li>• Steam Sterilizable</li> </ul>
Uses	<ul style="list-style-type: none"> <li>• Battery Cases</li> <li>• Connectors</li> <li>• Electrical/Electronic Applications</li> <li>• Engineering Parts</li> <li>• Housings</li> <li>• Industrial Parts</li> <li>• Medical/Healthcare Applications</li> <li>• Semiconductor Applications</li> <li>• Surgical Instruments</li> </ul>
Forms	• Pellets
Processing Method	• Injection Molding

**Properties <sup>1</sup>**

<b>Physical</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Density / Specific Gravity	1.53		ASTM D792
Molding Shrinkage - Flow	2.0E-3 to 4.0E-3	in/in	ASTM D955
Water Absorption (24 hr)	0.060	%	ASTM D570
<b>Mechanical</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Tensile Strength	18200	psi	ASTM D638
Tensile Elongation (Yield)	2.0 to 4.0	%	ASTM D638
Flexural Modulus	1.25E+6	psi	ASTM D790
Flexural Strength	27700	psi	ASTM D790
<b>Impact</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Notched Izod Impact (0.125 in)	1.9	ft-lb/in	ASTM D256
Unnotched Izod Impact (0.125 in)	18	ft-lb/in	ASTM D4812
<b>Thermal</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Deflection Temperature Under Load (264 psi, Unannealed)	400	°F	ASTM D648
<b>Electrical</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Surface Resistivity	1.0E+17	ohms	ASTM D257
<b>Flammability</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Flame Rating (0.06 in)	HB		UL 94

**Processing Information**

<b>Injection</b>	<b>Nominal Value</b>	<b>Unit</b>
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

