

**InStruc® PBTGF60**
*Americhem - Polybutylene Terephthalate*
**General Information**
**Product Description**

60% GLASS FIBER REINFORCED PBT

**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, 60% Filler by Weight
Features	<ul style="list-style-type: none"> <li>• Filled</li> <li>• Good Dimensional Stability</li> <li>• High Stiffness</li> <li>• High Strength</li> </ul>
Uses	<ul style="list-style-type: none"> <li>• Automotive Applications</li> <li>• Battery Cases</li> <li>• Connectors</li> <li>• Consumer Applications</li> <li>• Electrical/Electronic Applications</li> <li>• Engineering Parts</li> <li>• Household Goods</li> <li>• Housings</li> <li>• Industrial Applications</li> <li>• Industrial Parts</li> <li>• Semiconductor Applications</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	1.85		ASTM D792
Molding Shrinkage - Flow	1.0E-3 to 3.0E-3	in/in	ASTM D955
Water Absorption (24 hr)	0.040	%	ASTM D570
<b>Mechanical</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Tensile Strength	22000	psi	ASTM D638
Tensile Elongation (Yield)	1.0 to 3.0	%	ASTM D638
Flexural Modulus	2.30E+6	psi	ASTM D790
Flexural Strength	34000	psi	ASTM D790
<b>Impact</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Notched Izod Impact (0.125 in)	2.6	ft·lb/in	ASTM D256
Unnotched Izod Impact (0.125 in)	15 to 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)	415	°F	ASTM D648
<b>Electrical</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Dielectric Constant			ASTM D150
60 Hz	3.60		
1 MHz	2.00		

**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
Vent Depth	1.5E-3 to 3.0E-3	in

