

**InStruc® PPAGF40HW**

Americhem - Polyphthalamide

**General Information**
**Product Description**

40% GLASS FIBER REINFORCED, HOT WATER MOLDABLE POLYPHTHALAMIDE.

**General**

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Filler / Reinforcement	• Glass Fiber, 40% Filler by Weight		
Features	• Filled • Good Dimensional Stability	• High Stiffness • High Strength	• Hot Water Moldability
Uses	• Aerospace Applications • Connectors • Consumer Applications • Electrical/Electronic Applications • Engineering Parts	• Housings • Industrial Applications • Industrial Parts • Metal Replacement • Military/Defense Applications	• Oil/Gas Applications • Outdoor Applications • Semiconductor Applications
Forms	• Pellets		
Processing Method	• Injection Molding		

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

	Nominal Value	Unit	Test Method
<b>Physical</b>			
Density / Specific Gravity	1.52		ASTM D792
Molding Shrinkage - Flow	3.0E-3 to 5.0E-3	in/in	ASTM D955
<b>Mechanical</b>			
Tensile Modulus	1.80E+6	psi	ASTM D638
Tensile Strength	30000	psi	ASTM D638
Tensile Elongation (Yield)	1.0 to 2.0	%	ASTM D638
Flexural Modulus	1.90E+6	psi	ASTM D790
Flexural Strength	44000	psi	ASTM D790
<b>Impact</b>			
Notched Izod Impact (0.125 in)	1.7	ft·lb/in	ASTM D256
<b>Thermal</b>			
Deflection Temperature Under Load (264 psi, Unannealed)	550	°F	ASTM D648

**Processing Information**

	Nominal Value	Unit
<b>Injection</b>		
Drying Temperature	275	°F
Drying Time	4.0	hr
Processing (Melt) Temp	625 to 650	°F
Mold Temperature	150 to 200	°F
Back Pressure	50.0 to 100	psi
Screw Speed	40 to 70	rpm

**Notes**
<sup>1</sup> Typical properties: these are not to be construed as specifications.
