

**InStruc® PA6GF40**

Americhem - Polyamide 6

## General Information

**Product Description**

40% GLASS FIBER REINFORCED NYLON 6

**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
Uses	• Automotive Applications • Closures • Consumer Applications • Electrical/Electronic Applications • Engineering Parts • Household Goods • Industrial Applications • Industrial Parts • Office Automation Equipment • Outdoor Applications • Window & Door Components
Forms	• Pellets
Processing Method	• Injection Molding

 Properties <sup>1</sup>

	Nominal Value	Unit	Test Method
<b>Physical</b>			
Density / Specific Gravity	1.46		ASTM D792
Molding Shrinkage - Flow	1.0E-3 to 4.0E-3	in/in	ASTM D955
Water Absorption (24 hr)	0.80	%	ASTM D570
<b>Mechanical</b>			
Tensile Strength	27000	psi	ASTM D638
Tensile Elongation (Yield)	2.0 to 4.0	%	ASTM D638
Flexural Modulus	1.50E+6	psi	ASTM D790
Flexural Strength	40000	psi	ASTM D790
<b>Impact</b>			
Notched Izod Impact (0.125 in)	2.0	ft·lb/in	ASTM D256
<b>Thermal</b>			
Deflection Temperature Under Load (264 psi, Unannealed)	420	°F	ASTM D648

## Processing Information

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

