

**InStruc® PA66GF40HS**

Americhem - Polyamide 66

## General Information

**Product Description**

40% GLASS FIBER REINFORCED, HEAT STABILIZED NYLON 6/6

**General**

Material Status	• Commercial: Active		
Availability	• Africa & Middle East	• Europe	• North America
	• Asia Pacific	• Latin America	
Filler / Reinforcement	• Glass Fiber, 40% Filler by Weight		
Features	• Filled	• High Stiffness	
	• Good Dimensional Stability	• High Strength	
Uses	• Automotive Applications	• Engineering Parts	• Office Automation Equipment
	• Closures	• Household Goods	• Outdoor Applications
	• Consumer Applications	• Industrial Applications	• Window & Door Components
	• Electrical/Electronic Applications	• Industrial Parts	
Forms	• Pellets		
Processing Method	• Injection Molding		

 Properties <sup>1</sup>

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.48		ASTM D792
Molding Shrinkage - Flow	1.0E-3 to 3.0E-3	in/in	ASTM D955
Water Absorption (24 hr)	0.60	%	ASTM D570
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	1.80E+6	psi	ASTM D638
Tensile Strength	30200	psi	ASTM D638
Tensile Elongation (Yield)	2.0 to 3.0	%	ASTM D638
Flexural Modulus	1.50E+6	psi	ASTM D790
Flexural Strength	43000	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (0.125 in)	2.0	ft-lb/in	ASTM D256
Unnotched Izod Impact (0.125 in)	14 to 17	ft-lb/in	ASTM D4812
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (264 psi, Unannealed)	490	°F	ASTM D648
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	> 1.0E+17	ohms	ASTM D257
Flammability	Nominal Value	Unit	Test Method
Flame Rating			UL 94
0.06 in		HB	
0.13 in		HB	

## Processing Information

Injection	Nominal Value	Unit
Drying Temperature	175	°F
Drying Time	4.0	hr
Processing (Melt) Temp	500 to 575	°F
Mold Temperature	200	°F
Back Pressure	50.0 to 100	psi
Screw Speed	40 to 70	rpm

