

**InStruc® PPAGF45HSMD**

Americhem - Polyphthalamide

## General Information

**Product Description**

45% GLASS FIBER REINFORCED, HEAT STABILIZED POLYPHTHALAMIDE. SUITABLE FOR HEALTHCARE APPLICATIONS.

**General**

Material Status	• Commercial: Active		
Availability	• Africa & Middle East	• Europe	• North America
	• Asia Pacific	• Latin America	
Filler / Reinforcement	• Glass Fiber, 45% Filler by Weight		
Features	• Filled	• High Stiffness	
	• Good Dimensional Stability	• High Strength	
Uses	• Connectors	• Engineering Parts	• Metal Replacement
	• Electrical/Electronic Applications	• Housings	• Semiconductor Applications
Forms	• Pellets		
Processing Method	• Injection Molding		

 Properties <sup>1</sup>

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.59		ASTM D792
Molding Shrinkage - Flow	1.0E-3 to 2.0E-3	in/in	ASTM D955
Water Absorption (24 hr)	0.15	%	ASTM D570
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	2.45E+6	psi	ASTM D638
Tensile Strength	36000	psi	ASTM D638
Tensile Elongation (Yield)	1.0 to 3.0	%	ASTM D638
Flexural Modulus	1.95E+6	psi	ASTM D790
Flexural Strength	50000	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (0.125 in)	2.2	ft·lb/in	ASTM D256
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (264 psi, Unannealed)	535	°F	ASTM D648

## Processing Information

Injection	Nominal Value	Unit
Drying Temperature	275	°F
Drying Time	4.0	hr
Processing (Melt) Temp	575 to 625	°F
Mold Temperature	275	°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.
