

InStruc® PPAGF40MD

Americhem - Polyphthalamide

General Information
Product Description

40% GLASS FIBER REINFORCED POLYPHTHALAMIDE FOR HEALTHCARE APPLICATIONS

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	• Connectors • Electrical/Electronic Applications • Engineering Parts	• Housings • Medical/Healthcare Applications • Metal Replacement	• Surgical Instruments
Forms	• Pellets		
Processing Method	• Injection Molding		

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.55		ASTM D792
Molding Shrinkage - Flow	2.0E-3 to 3.0E-3	in/in	ASTM D955
Water Absorption (24 hr)	0.25	%	ASTM D570
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	2.15E+6	psi	ASTM D638
Tensile Strength	32000	psi	ASTM D638
Tensile Elongation (Yield)	1.0 to 3.0	%	ASTM D638
Flexural Modulus	1.95E+6	psi	ASTM D790
Flexural Strength	46000	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (0.125 in)	2.0	ft·lb/in	ASTM D256
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (264 psi, Unannealed)	530	°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
¹ Typical properties: these are not to be construed as specifications.
