

InStruc® PPAGF50HW

Americhem - Polyphthalamide

General Information

Product Description

50% 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, 50% 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 ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.62		ASTM D792
Molding Shrinkage - Flow	2.0E-3 to 3.0E-3	in/in	ASTM D955
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	2.40E+6	psi	ASTM D638
Tensile Strength	34000	psi	ASTM D638
Tensile Elongation (Yield)	1.0 to 2.0	%	ASTM D638
Flexural Modulus	2.50E+6	psi	ASTM D790
Flexural Strength	52000	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)	550	°F	ASTM D648

Processing Information

Injection	Nominal Value	Unit
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

¹ Typical properties: these are not to be construed as specifications.
