

InStruc® PPACF15GF10HS

Americhem - Polyphthalamide

General Information

Product Description

15% CARBON FIBER AND 10% GLASS FIBER REINFORCED, HEAT STABILIZED, POLYPHTHALAMIDE.

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Filler / Reinforcement	• Carbon Fiber, 15% Filler by Weight	• Glass Bead, 10% Filler by Weight	
Additive	• Heat Stabilizer		
Features	• Filled • Good Dimensional Stability	• Heat Stabilized • High Stiffness	• High Strength
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

	Nominal Value	Unit	Test Method
Physical			
Density / Specific Gravity	1.31		ASTM D792
Molding Shrinkage - Flow	5.0E-4 to 2.0E-3	in/in	ASTM D955
Mechanical			
Tensile Modulus	2.80E+6	psi	ASTM D638
Tensile Strength	36000	psi	ASTM D638
Tensile Elongation (Yield)	1.0 to 2.0	%	ASTM D638
Flexural Modulus	2.30E+6	psi	ASTM D790
Flexural Strength	50000	psi	ASTM D790
Impact			
Notched Izod Impact (0.125 in)	1.0	ft·lb/in	ASTM D256
Unnotched Izod Impact (0.125 in)	10	ft·lb/in	ASTM D4812
Thermal			
Deflection Temperature Under Load (264 psi, Unannealed)	545	°F	ASTM D648
Electrical			
Surface Resistivity	1.0E+3 to 1.0E+6	ohms	ASTM D257

Processing Information

	Nominal Value	Unit
Injection		
Drying Temperature	275	°F
Drying Time	4.0	hr
Processing (Melt) Temp	625	°F
Mold Temperature	275 to 325	°F
Back Pressure	50.0 to 100	psi
Screw Speed	40 to 70	rpm
Vent Depth	5.0E-4 to 1.0E-3	in

