

InLube® PPAGF20TF15
 Americhem - Polyphthalamide

General Information
Product Description

20% GLASS FIBER REINFORCED 15% PTFE LUBRICATED PPA

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East	• Europe	• North America
	• Asia Pacific	• Latin America	
Filler / Reinforcement	• Glass Fiber, 20% Filler by Weight		
Additive	• PTFE Lubricant: 15%		
Features	• Chemical Resistant	• Good Mold Release	• Low Friction
	• Filled	• High Stiffness	• Lubricated
	• Good Dimensional Stability	• High Strength	• Wear Resistant
Uses	• Aerospace Applications	• Engineering Parts	• Military/Defense Applications
	• Connectors	• Industrial Applications	• Oil/Gas Applications
	• Consumer Applications	• Industrial Parts	• Outdoor Applications
	• Electrical/Electronic Applications	• Metal Replacement	• Semiconductor Applications
Forms	• Pellets		
Processing Method	• Injection Molding		

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.45		ASTM D792
Specific Volume	19.1	in ³ /lb	
Molding Shrinkage - Flow	3.0E-3 to 5.0E-3	in/in	ASTM D955
Water Absorption (24 hr)	0.20	%	ASTM D570
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength	20000	psi	ASTM D638
Tensile Elongation (Yield)	1.0 to 3.0	%	ASTM D638
Flexural Modulus	1.15E+6	psi	ASTM D790
Flexural Strength	28000	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (0.125 in)	1.2	ft·lb/in	ASTM D256
Unnotched Izod Impact (0.125 in)	8.0	ft·lb/in	ASTM D4812
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (264 psi, Unannealed)	525	°F	ASTM D648
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	1.0E+17	ohms	
Flammability	Nominal Value	Unit	Test Method
Flame Rating (0.06 in)	HB		UL 94

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	180	°F
Drying Time	4.0	hr
Processing (Melt) Temp	625	°F
Mold Temperature	275	°F
Back Pressure	50.0 to 100	psi
Screw Speed	40 to 70	rpm
Vent Depth	5.0E-4 to 1.0E-3	in

