

InLube® PPACF15TF10

Americhem - Polyphthalamide

General Information
Product Description

15% CARBON FIBER REINFORCED, 10% PTFE LUBRICATED, POLYPHTHALAMIDE

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East	• Europe	• North America
	• Asia Pacific	• Latin America	
Filler / Reinforcement	• Carbon Fiber, 15% Filler by Weight		
Additive	• PTFE Lubricant: 10%		
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	1.31		ASTM D792
Molding Shrinkage - Flow	1.0E-3 to 3.0E-3	in/in	ASTM D955
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	2.30E+6	psi	ASTM D638
Tensile Strength	31000	psi	ASTM D638
Tensile Elongation (Yield)	2.0	%	ASTM D638
Flexural Modulus	2.10E+6	psi	ASTM D790
Flexural Strength	37000	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (0.125 in)	1.0	ft·lb/in	ASTM D256
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (264 psi, Unannealed)	545	°F	ASTM D648
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	1.0E+3 to 1.0E+7	ohms	ASTM D257

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	250	°F
Drying Time	4.0	hr
Suggested Max Moisture	0.20	%
Processing (Melt) Temp	625	°F
Mold Temperature	275 to 325	°F
Back Pressure	50.0 to 100	psi
Screw Speed	40 to 70	rpm

