

InLube® PPACF30TF10SI2

Americhem - Polyphthalamide

General Information
Product Description

InLube® PPACF30TF10SI2 is a 30% carbon fiber reinforced, 10% PTFE, and 2% silicone lubricated polyphthalamide. This product offers great strength, as well as lubricating properties.

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East	• Europe	• North America
	• Asia Pacific	• Latin America	
Filler / Reinforcement	• Carbon Fiber, 30% Filler by Weight		
Additive	• PTFE Lubricant: 10%	• Silicone Lubricant: 2%	
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

	Nominal Value	Unit	Test Method
Physical			
Density / Specific Gravity	1.40		ASTM D792
Molding Shrinkage - Flow	5.0E-4 to 2.0E-3	in/in	ASTM D955
Water Absorption (24 hr)	0.20	%	ASTM D570
Mechanical			
Tensile Modulus	3.60E+6	psi	ASTM D638
Tensile Strength	36000	psi	ASTM D638
Tensile Elongation (Yield)	1.0 to 3.0	%	ASTM D638
Flexural Modulus	3.20E+6	psi	ASTM D790
Flexural Strength	50000	psi	ASTM D790
Impact			
Notched Izod Impact (0.125 in)	1.4	ft·lb/in	ASTM D256
Unnotched Izod Impact (0.125 in)	13	ft·lb/in	ASTM D4812
Thermal			
Deflection Temperature Under Load (264 psi, Unannealed)	530	°F	ASTM D648

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

