

## InLube® PEICF5TF10SI2

Americhem - Polyetherimide

### General Information

#### Product Description

InLube PEICF5TF10SI2 is a 5% carbon fiber reinforced, 10% PTFE, 2% silicone lubricated polyetherimide. This product gives a mix of high strength and internal lubrication.

#### General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East	• Europe	• North America
	• Asia Pacific	• Latin America	
Filler / Reinforcement	• Carbon Fiber, 5.0% 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 <sup>1</sup>

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.33		ASTM D792
Molding Shrinkage - Flow	2.0E-3 to 3.0E-3	in/in	ASTM D955
Water Absorption (24 hr)	0.14	%	ASTM D570
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	430000	psi	ASTM D638
Tensile Strength	15000	psi	ASTM D638
Tensile Elongation (Yield)	2.0 to 4.0	%	ASTM D638
Flexural Modulus	480000	psi	ASTM D790
Flexural Strength	18000	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (0.125 in)	0.90	ft-lb/in	ASTM D256
Unnotched Izod Impact (0.125 in)	10	ft-lb/in	ASTM D4812
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (264 psi, Unannealed)	410	°F	ASTM D648

### Processing Information

Injection	Nominal Value	Unit
Drying Temperature	300	°F
Drying Time	4.0	hr
Processing (Melt) Temp	680 to 715	°F
Mold Temperature	300	°F
Back Pressure	50.0 to 100	psi
Screw Speed	40 to 70	rpm
Vent Depth	1.5E-3 to 3.0E-3	in

