

InLube® PPSUCF10TF5SI2

Americhem - Polyphenylsulfone

General Information
Product Description

InLube PPSUCF10TF5SI2 is a 10% carbon fiber reinforced PPSU with 5% PTFE and silicone. InLube PPSUCF10TF5SI2 offers high operating temperatures, good chemical compatibility, excellent hydrolysis resistance, good dimensional stability, and favorable mechanical properties.

General

Material Status	<ul style="list-style-type: none"> Commercial: Active 		
Availability	<ul style="list-style-type: none"> Africa & Middle East Asia Pacific 	<ul style="list-style-type: none"> Europe Latin America 	<ul style="list-style-type: none"> North America
Filler / Reinforcement	<ul style="list-style-type: none"> Carbon Fiber, 10% Filler by Weight 		
Additive	<ul style="list-style-type: none"> PTFE Lubricant: 5% 	<ul style="list-style-type: none"> Silicone Lubricant: 2% 	
Features	<ul style="list-style-type: none"> Chemical Resistant Filled Good Dimensional Stability 	<ul style="list-style-type: none"> Good Mold Release High Stiffness High Strength 	<ul style="list-style-type: none"> Low Friction Lubricated Wear Resistant
Uses	<ul style="list-style-type: none"> Aerospace Applications Connectors Consumer Applications Electrical/Electronic Applications 	<ul style="list-style-type: none"> Engineering Parts Industrial Applications Industrial Parts Metal Replacement 	<ul style="list-style-type: none"> Military/Defense Applications Oil/Gas Applications Outdoor Applications Semiconductor Applications
Forms	<ul style="list-style-type: none"> Pellets 		
Processing Method	<ul style="list-style-type: none"> Injection Molding 		

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.35		ASTM D792
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	700000	psi	ASTM D638
Tensile Strength	15000	psi	ASTM D638
Tensile Elongation (Yield)	2.0 to 4.0	%	ASTM D638
Flexural Modulus	800000	psi	ASTM D790
Flexural Strength (Yield)	22000	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact	1.3 to 1.5	ft·lb/in	ASTM D256

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	300	°F
Drying Time	2.0 to 4.0	hr
Processing (Melt) Temp	650 to 730	°F
Mold Temperature	280 to 325	°F
Back Pressure	50.0 to 100	psi

