InLube® PPSCF30TF13SI2

Americhem - *Polyphenylene Sulfide*

General Information

Product Description			
30% CARBON FIBER REINFORCED, 15% PTFE/SILICONE LUBRICATED POLYPHENYLENE SULFIDE			
General			
Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Filler / Reinforcement	• Carbon Fiber, 30% Filler by Weight		
Additive	• PTFE Lubricant: 13%	• Silicone Lubricant: 2%	
Features	• Branched Polymer Structure • Chemical Resistant • Filled • Good Dimensional Stability	• Good Mold Release • High Stiffness • High Strength • Low Friction	• Lubricated • Wear Resistant
Uses	• Aerospace Applications • Connectors • Consumer Applications • Electrical/Electronic Applications	• Engineering Parts • Industrial Applications • Industrial Parts • Metal Replacement	• Military/Defense Applications • Oil/Gas Applications • Outdoor Applications • Semiconductor Applications
Forms	• Pellets		
Processing Method	• Injection Molding		

Properties [1]

Physical	**Nominal Value**	**Unit**	**Test Method**
Density / Specific Gravity	1.53		ASTM D792
Molding Shrinkage - Flow (0.125 in)	5.0E-4 to 2.0E-3	in/in	ASTM D955
Water Absorption (Equilibrium)	0.040	%	ASTM D570
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Strength (Break)	24500	psi	ASTM D638
Tensile Elongation (Break)	1.0 to 2.0	%	ASTM D638
Flexural Modulus	3.00E+6	psi	ASTM D790
Impact	**Nominal Value**	**Unit**	**Test Method**
Notched Izod Impact	0.80	ft·lb/in	ASTM D256
Thermal	**Nominal Value**	**Unit**	**Test Method**
Deflection Temperature Under Load (264 psi, Unannealed)	500	°F	ASTM D648
Electrical	**Nominal Value**	**Unit**	**Test Method**
Surface Resistivity	10 to 1.0E+2	ohms	ASTM D257

Processing Information

Injection	**Nominal Value**	**Unit**
Drying Temperature	300	°F
Drying Time	4.0	hr
Processing (Melt) Temp	600 to 630	°F
Mold Temperature	275 to 350	°F
Back Pressure	50.0 to 100	psi
Screw Speed	40 to 70	rpm
Vent Depth	3.0E-4 to 5.0E-4	in