

InLube® PCCF30TF15

Americhem - Polycarbonate

General Information

Product Description

30% CARBON FIBER REINFORCED, 15% PTFE LUBRICATED POLYCARBONATE

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: 15%
Features	• Chemical Resistant • Filled • Good Dimensional Stability • Good Mold Release • High Stiffness • High Strength • Low Friction • Lubricated • Wear Resistant
Uses	• Automotive Applications • Closures • Connectors • Consumer Applications • Electrical/Electronic Applications • Engineering Parts • Household Goods • Housings • Industrial Applications • Industrial Parts • Office Automation Equipment
Forms	• Pellets
Processing Method	• Injection Molding

 Properties ¹

	Nominal Value	Unit	Test Method
Physical			
Density / Specific Gravity	1.43		ASTM D792
Specific Volume	19.4	in ³ /lb	
Molding Shrinkage - Flow	5.0E-4 to 1.0E-3	in/in	ASTM D955
Water Absorption (24 hr)	0.060	%	ASTM D570
Mechanical			
Tensile Strength	22000	psi	ASTM D638
Flexural Modulus	1.90E+6	psi	ASTM D790
Flexural Strength	33000	psi	ASTM D790
Impact			
Notched Izod Impact (0.125 in)	1.0	ft-lb/in	ASTM D256
Unnotched Izod Impact (0.125 in)	10	ft-lb/in	ASTM D4812
Hardness			
Rockwell Hardness (M-Scale)	92		
Thermal			
Deflection Temperature Under Load (264 psi, Unannealed)	290	°F	ASTM D648
CLTE - Flow	1.0E-5	in/in/°F	ASTM D696
Electrical			
Surface Resistivity	1.0E+3 to 1.0E+5	ohms	
Flammability			
Flame Rating (0.06 in)	HB		UL 94

Processing Information

	Nominal Value	Unit
Injection		
Drying Temperature	250	°F
Drying Time	4.0	hr
Processing (Melt) Temp	540 to 630	°F
Mold Temperature	200	°F
Back Pressure	50.0 to 100	psi



Screw Speed	40 to 70 rpm
Vent Depth	1.5E-3 to 3.0E-3 in

Notes

¹ Typical properties: these are not to be construed as specifications.

