InLube® PCCF20TF15
Americhem - *Polycarbonate*

General Information

Product Description
20% 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, 20% 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]

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.38		ASTM D792
Specific Volume	20.1	in³/lb	
Molding Shrinkage - Flow	5.0E-4 to 2.0E-3	in/in	ASTM D955
Water Absorption (24 hr)	0.060	%	ASTM D570

Mechanical	Nominal Value	Unit	Test Method
Tensile Strength	19000	psi	ASTM D638
Flexural Modulus	1.30E+6	psi	ASTM D790
Flexural Strength	28000	psi	ASTM D790

Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (0.125 in)	1.0	ft·lb/in	ASTM D256
Unnotched Izod Impact (0.125 in)	12	ft·lb/in	ASTM D4812

Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (M-Scale)	87		

Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (264 psi, Unannealed)	295	°F	ASTM D648
CLTE - Flow	1.3E-5	in/in/°F	ASTM D696

Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	1.0E+3 to 1.0E+5	ohms	

Flammability	Nominal Value	Unit	Test Method
Flame Rating (0.06 in)	HB		UL 94

Processing Information

Injection	Nominal Value	Unit
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.