InLube® PA66CF20TF10

Americhem - *Polyamide 66*

General Information

Product Description			
20% CARBON FIBER REINFORCED 10% PTFE LUBRICATED NYLON 6/6			
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: 10%		
Features	• Chemical Resistant • Filled • Good Dimensional Stability	• Good Mold Release • High Stiffness • High Strength	• Low Friction • Lubricated • Wear Resistant
Uses	• Closures • Consumer Applications • Electrical/Electronic Applications	• Engineering Parts • Household Goods • Industrial Applications	• Industrial Parts • Office Automation Equipment • Outdoor Applications
Forms	• Pellets		
Processing Method	• Injection Molding		

Properties [1]

Physical	**Nominal Value**	**Unit**	**Test Method**
Density / Specific Gravity	1.30		ASTM D792
Specific Volume	21.0	in³/lb	
Molding Shrinkage - Flow	3.0E-3 to 5.0E-3	in/in	ASTM D955
Water Absorption (24 hr)	0.60	%	ASTM D570
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus	1.80E+6	psi	ASTM D638
Tensile Strength	27000	psi	ASTM D638
Tensile Elongation (Yield)	2.0 to 3.0	%	ASTM D638
Flexural Modulus	1.90E+6	psi	ASTM D790
Flexural Strength	43000	psi	ASTM D790
Impact	**Nominal Value**	**Unit**	**Test Method**
Notched Izod Impact (0.125 in)	1.8	ft·lb/in	ASTM D256
Unnotched Izod Impact (0.125 in)	15	ft·lb/in	ASTM D4812
Thermal	**Nominal Value**	**Unit**	**Test Method**
Deflection Temperature Under Load (264 psi, Unannealed)	480	°F	ASTM D648
CLTE - Flow	2.0E-5	in/in/°F	ASTM D696
Electrical	**Nominal Value**	**Unit**	**Test Method**
Surface Resistivity	1.0E+3 to 1.0E+7	ohms	
Flammability	**Nominal Value**	**Unit**	**Test Method**
Flame Rating (0.06 in)	HB		UL 94

Processing Information

Injection	**Nominal Value**	**Unit**
Drying Temperature	175	°F
Drying Time	4.0	hr
Processing (Melt) Temp	500 to 575	°F
Mold Temperature	200	°F
Back Pressure	50.0 to 100	psi
Screw Speed	40 to 70	rpm
Vent Depth	5.0E-4 to 1.0E-3	in