

**TECHNICAL DATA AND PROCESS SHEET**

**10% CARBON FIBER REINFORCED COPOLYMER ACETAL**

**INELEC POMCCF10**

**TYPICAL PROPERTIES**

<b>PROPERTY</b>	<b>ASTM METHOD</b>	<b>English</b>	<b>UNITS</b>	<b>Metric SI</b>	<b>UNITS</b>
<b>GENERAL</b>					
SPECIFIC GRAVITY	D792	1.44		1.44	
SPECIFIC VOLUME		19.2	in <sup>3</sup> /lb	0.694	cm <sup>3</sup> /gm
WATER ABSORPTION (24 Hrs)	D570	0.26	%	0.26	%
MOLD SHRINKAGE	D955	0.7-0.9	%	0.7-0.9	%
<b>MECHANICAL</b>					
TENSILE STRENGTH	D638	10,500	psi	72	MPa
ELONGATION, YIELD	D638	3-5	%	3-5	%
FLEXURAL STRENGTH	D790	17,000	psi	117	MPa
FLEXURAL MODULUS	D790	1,100,000	psi	7,584	MPa
SHEAR STRENGTH	D732				
IZOD IMPACT STRENGTH	D256				
NOTCHED 1/8"		1.1	ft.lb./in.	59	J/m
UNNOTCHED 1/8"		8	ft.lb./in.	426	J/m
ROCKWELL HARDNESS					
<b>THERMAL</b>					
HDTUL	D648	300	°F	149	°C
@ 264 PSI					
COEFFICIENT OF LINEAR THERMAL EXPANSION	D696	3.6	in./in. F x10 <sup>-5</sup>	6.48	mm/mm C 10 <sup>-6</sup>
FLAMMABILITY <sup>1</sup>	U.L.Subj 94	HB@1/16"	in	HB@1.5	mm
<b>ELECTRICAL</b>					
SURFACE RESISTIVITY		10e2 -10e6	ohms/sq	10e2 -10e6	ohms/sq
<b>PROCESSING</b>					
DRYING TEMPERATURE		180	°F	82	°C
DRYING TIME		4	hrs	4	hrs
MELT TEMPERATURE		375-410	°F	190 - 210	°C
MOLD TEMPERATURE		200	°F	93	°C
BACK PRESSURE		50-100	psi	0.3 - 0.7	MPa
SCREW SPEED		30-60	rpm	30-60	rpm
VENT DEPTH		0.0005-0.001	in	0.0125 - 0.0251	mm

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