

**TECHNICAL DATA AND PROCESS SHEET**

**30% CARBON FIBER REINFORCED COPOLYMER ACETAL**

**INELEC POMCCF30**

**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	1.48		1.48	
SPECIFIC VOLUME		18.7	in <sup>3</sup> /lb	0.676	cm <sup>3</sup> /gm
WATER ABSORPTION (24 Hrs)	D570	0.5	%	0.50	%
MOLD SHRINKAGE	D955	0.4-0.6	%	0.4-0.6	%
<b>MECHANICAL</b>					
TENSILE STRENGTH	D638	22,000	psi	152	MPa
ELONGATION, YIELD	D638				
FLEXURAL STRENGTH	D790	35,000	psi	241	MPa
FLEXURAL MODULUS	D790	2,200,000	psi	15,168	MPa
SHEAR STRENGTH	D732				
IZOD IMPACT STRENGTH	D256				
NOTCHED 1/8"		1.0	ft.lb./in.	53	J/m
UNNOTCHED 1/8"		4	ft.lb./in.	213	J/m
ROCKWELL HARDNESS					
<b>THERMAL</b>					
HDTUL	D648	325	°F	163	°C
@ 264 PSI					
COEFFICIENT OF LINEAR THERMAL EXPANSION	D696	2	in./in. F x10 <sup>-5</sup>	3.6	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		10e2-10e4	ohms/sq	10e2-10e4	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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