

**TECHNICAL DATA AND PROCESS SHEET**

**10% GLASS FIBER REINFORCED COPOLYMER ACETAL**

**INSTRUC POMCGF10**

**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	1.47		1.47	
SPECIFIC VOLUME		18.8	in <sup>3</sup> /lb	0.680	cm <sup>3</sup> /gm
WATER ABSORPTION (24 Hrs)	D570	0.25	%	0.25	%
MOLD SHRINKAGE	D955	0.7-1.2	%	0.7-1.2	%
<b>MECHANICAL</b>					
TENSILE STRENGTH	D638	11,500	psi	79	MPa
ELONGATION, YIELD	D638	4-6	%	4-6	%
FLEXURAL STRENGTH	D790	17,000	psi	117	MPa
FLEXURAL MODULUS	D790	550,000	psi	3,792	MPa
SHEAR STRENGTH	D732	8,000	psi	55	MPa
IZOD IMPACT STRENGTH	D256				
NOTCHED 1/8"		1.4	ft.lb./in.	75	J/m
UNNOTCHED 1/8"		10	ft.lb./in.	533	J/m
ROCKWELL HARDNESS		M82	M Scale	M82	M Scale
<b>THERMAL</b>					
HDTUL	D648	300	°F	149	°C
@ 264 PSI					
COEFFICIENT OF LINEAR THERMAL EXPANSION	D696	4	in./in. F x10 <sup>-5</sup>	7.2	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		10e <sup>16</sup>	ohms/sq	10e <sup>16</sup>	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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