

**TECHNICAL DATA AND PROCESS SHEET**

**20% GLASS FIBER REINFORCED COPOLYMER ACETAL**

**INSTRUC POMCGF20**

**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	1.54		1.54	
SPECIFIC VOLUME		18.0	in <sup>3</sup> /lb	0.649	cm <sup>3</sup> /gm
WATER ABSORPTION (24 Hrs)	D570	0.3	%	0.30	%
MOLD SHRINKAGE	D955	0.4-0.8	%	0.4-0.8	%
<b>MECHANICAL</b>					
TENSILE STRENGTH	D638	16,500	psi	114	MPa
ELONGATION, YIELD	D638	2-4	%	2-4	%
FLEXURAL STRENGTH	D790	20,000	psi	138	MPa
FLEXURAL MODULUS	D790	850,000	psi	5,861	MPa
SHEAR STRENGTH	D732				
IZOD IMPACT STRENGTH	D256				
NOTCHED 1/8"		1.6	ft.lb./in.	85	J/m
UNNOTCHED 1/8"		9	ft.lb./in.	480	J/m
ROCKWELL HARDNESS		M86	M Scale	M86	M Scale
<b>THERMAL</b>					
HDTUL	D648	315	°F	157	°C
@ 264 PSI					
COEFFICIENT OF LINEAR THERMAL EXPANSION	D696	3.3	in./in. F x10 <sup>-5</sup>	5.94	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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