

**TECHNICAL DATA AND PROCESS SHEET**

**20% CARBON FIBER REINFORCED, 15% PTFE LUBRICATED POLYCARBONATE**

**INLUBE PCCF20TF15**

**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	1.38		1.38	
SPECIFIC VOLUME		20.07	in <sup>3</sup> /lb	0.725	cm <sup>3</sup> /gm
WATER ABSORPTION (24 Hrs)	D570	0.06	%	0.06	%
MOLD SHRINKAGE	D955	0.05-0.2	%	0.05-0.2	%
<b>MECHANICAL</b>					
TENSILE STRENGTH	D638	19,000	psi	131	MPa
ELONGATION, YIELD	D638				
FLEXURAL STRENGTH	D790	28,000	psi	193	MPa
FLEXURAL MODULUS	D790	1,300,000	psi	8,963	MPa
SHEAR STRENGTH	D732				
IZOD IMPACT STRENGTH	D256				
NOTCHED 1/8"		1	ft.lb./in.	53	J/m
UNNOTCHED 1/8"		12	ft.lb./in.	640	J/m
ROCKWELL HARDNESS		M87	M Scale	M87	M Scale
<b>THERMAL</b>					
HDTUL	D648	295	°F	146	°C
@ 264 PSI					
COEFFICIENT OF LINEAR THERMAL EXPANSION	D696	1.3	in./in. F x10 <sup>-5</sup>	2.34	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		250	°F	121	°C
DRYING TIME		4	hrs	4	hrs
MELT TEMPERATURE		540-630	°F	280- 330	°C
MOLD TEMPERATURE		200	°F	93	°C
BACK PRESSURE		50-100	psi	0.3 - 0.7	MPa
SCREW SPEED		40-70	rpm	40-70	rpm
VENT DEPTH		0.0015-0.003	in	0.038 - 0.075	mm

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