

TECHNICAL DATA AND PROCESS SHEET

10% CARBON FIBER REINFORCED, 15% PTFE LUBRICATED POLYCARBONATE
INLUBE PCCF10TF15
TYPICAL PROPERTIES

PROPERTY	ASTM METHOD	English	UNITS	Metric SI	UNITS
GENERAL					
SPECIFIC GRAVITY	D792	1.33		1.33	
SPECIFIC VOLUME		20.83	in ³ /lb	0.752	cm ³ /gm
WATER ABSORPTION (24 Hrs)	D570	0.08	%	0.08	%
MOLD SHRINKAGE	D955	0.2-0.3	%	0.2-0.3	%
MECHANICAL					
TENSILE STRENGTH	D638	15,500	psi	107	MPa
ELONGATION, YIELD	D638				
FLEXURAL STRENGTH	D790	21,000	psi	145	MPa
FLEXURAL MODULUS	D790	900,000	psi	6,205	MPa
SHEAR STRENGTH	D732				
IZOD IMPACT STRENGTH	D256				
NOTCHED 1/8"		1.1	ft.lb./in.	59	J/m
UNNOTCHED 1/8"		15	ft.lb./in.	800	J/m
ROCKWELL HARDNESS		M82	M Scale	M82	M Scale
THERMAL					
HDTUL @ 264 PSI	D648	290	°F	143	°C
COEFFICIENT OF LINEAR THERMAL EXPANSION	D696	1.5	in./in. F x 10 ⁻⁵	2.7	mm/mm C 10 ⁻⁶
FLAMMABILITY ¹	U.L.Subj 94	HB@1/16	in	HB@ 1.5	mm
ELECTRICAL					
SURFACE RESISTIVITY		10e2 -10e6	ohms/sq	10e2 -10e6	ohms/sq
PROCESSING					
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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