

TECHNICAL DATA AND PROCESS SHEET

10% CARBON FIBER REINFORCED 10% PTFE LUBRICATED POLYETHERSULFONE

INLUBE PESCF10TF10

TYPICAL PROPERTIES

ASTM

PROPERTY	METHOD	English	UNITS	Metric SI	UNITS
GENERAL					
SPECIFIC GRAVITY	D792	1.45		1.45	
SPECIFIC VOLUME		19.1	in ³ /lb	0.690	cm ³ /gm
WATER ABSORPTION (24 Hrs)	D570	0.3	%	0.30	%
MOLD SHRINKAGE	D955	0.1-0.3	%	0.1-0.3	%
MECHANICAL					
TENSILE STRENGTH	D638	21,000	psi	145	MPa
ELONGATION, YIELD	D638	1-3	%	1-3	%
FLEXURAL STRENGTH	D790	30,000	psi	207	MPa
FLEXURAL MODULUS	D790	1,300,000	psi	8,963	MPa
SHEAR STRENGTH	D732				
IZOD IMPACT STRENGTH	D256				
NOTCHED 1/8"		1.1	ft.lb./in.	59	J/m
UNNOTCHED 1/8"		4	ft.lb./in.	213	J/m
ROCKWELL HARDNESS					
THERMAL					
HDTUL	D648	425	°F	218	$^{\circ}\mathrm{C}$
@ 264 PSI					
COEFFICIENT OF LINEAR	D696	1.6	in./in. F x10 ⁻⁵	2.88	mm/mm C 10 ⁻⁶
THERMAL EXPANSION	III C 1:04	V0@1/16		V0.01.5	
FLAMMABILITY ¹	U.L.Subj 94	V0@1/16	in	V0@1.5	mm
ELECTRICAL		2 6		2 6	
SURFACE RESISTIVITY		$10e^2 - 10e^6$	ohms/sq	$10e^2 - 10e^6$	ohms/sq
PROCESSING					
DRYING TEMPERATURE		300	°F	149	°C
DRYING TIME		4	hrs	4	hrs
MELT TEMPERATURE		650-715	°F	343 - 380	°C
MOLD TEMPERATURE		300	°F	149	°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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