

TECHNICAL DATA AND PROCESS SHEET

30% CARBON FIBER REINFORCED 15% PTFE LUBRICATED POLYETHERSULFONE

INLUBE PESCF30TF15

TYPICAL PROPERTIES

PROPERTY	ASTM METHOD	English	UNITS	Metric SI	UNITS
GENERAL					
SPECIFIC GRAVITY	D792	1.57		1.57	
SPECIFIC VOLUME		17.6	in ³ /lb	0.637	cm ³ /gm
WATER ABSORPTION (24 Hrs)	D570	0.25	%	0.25	%
MOLD SHRINKAGE	D955	0.05-0.1	%	0.05-0.1	%
MECHANICAL					
TENSILE STRENGTH	D638	24,000	psi	165	MPa
ELONGATION, YIELD	D638	1-3	%	1-3	%
FLEXURAL STRENGTH	D790	35,000	psi	241	MPa
FLEXURAL MODULUS	D790	3,400,000	psi	23,442	MPa
SHEAR STRENGTH	D732	9,300	psi		
IZOD IMPACT STRENGTH	D256				
NOTCHED 1/8"		1.1	ft.lb./in.	59	J/m
UNNOTCHED 1/8"		5	ft.lb./in.	267	J/m
ROCKWELL HARDNESS					
THERMAL					
HDTUL	D648	415	°F	213	°C
@ 264 PSI					
COEFFICIENT OF LINEAR THERMAL EXPANSION	D696	0.8	in./in. F x10 ⁻⁵	1.44	mm/mm C 10 ⁻⁶
FLAMMABILITY ¹	U.L.Subj 94	V0@1/16	in	V0@1.5	mm
ELECTRICAL					
SURFACE RESISTIVITY		10e ² -10e ⁴	ohms/sq	10e ² -10e ⁴	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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