

TECHNICAL DATA AND PROCESS SHEET

10% CARBON FIBER REINFORCED 10% PTFE LUBRICATED PPA

INLUBE PPACF10TF10

TYPICAL PROPERTIES

PROPERTY	ASTM METHOD	English	UNITS	Metric SI	UNITS
GENERAL					
SPECIFIC GRAVITY	D792	1.27		1.27	
SPECIFIC VOLUME		21.8	in ³ /lb	0.787	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	22,000	psi	152	MPa
ELONGATION, YIELD	D638				
FLEXURAL STRENGTH	D790	31,000	psi	214	MPa
FLEXURAL MODULUS	D790	1,450,000	psi	9,997	MPa
SHEAR STRENGTH	D732				
IZOD IMPACT STRENGTH	D256				
NOTCHED 1/8"		0.8	ft.lb./in.	43	J/m
UNNOTCHED 1/8"		6	ft.lb./in.	320	J/m
ROCKWELL HARDNESS					
THERMAL					
HDTUL @ 264 PSI	D648	475	°F	246	°C
COEFFICIENT OF LINEAR THERMAL EXPANSION	D696	1.5	in./in. F x10 ⁻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		10e ² -10e ⁶	ohms/sq	10e ² -10e ⁶	ohms/sq
PROCESSING					
DRYING TEMPERATURE		180	°F	82	°C
DRYING TIME		4	hrs	4	hrs
MELT TEMPERATURE		625	°F	330	°C
MOLD TEMPERATURE		275	°F	135	°C
BACK PRESSURE		50-100	psi	0.3 - 0.7	MPa
SCREW SPEED		40-70	rpm	40-70	rpm
VENT DEPTH		0.0005-0.001	in	0.0125-0.0251	mm

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