

TECHNICAL DATA AND PROCESS SHEET

20% CARBON FIBER REINFORCED, 15% PTFE LUBRICATED PEEK

INLUBE PEEKCF20TF15

TYPICAL PROPERTIES

PROPERTY	ASTM METHOD	English	UNITS	Metric SI	UNITS
GENERAL					
SPECIFIC GRAVITY	D792	1.45		1.45	
SPECIFIC VOLUME		19.10	in ³ /lb	0.690	cm ³ /gm
WATER ABSORPTION (24 Hrs)	D570	0.1	%	0.10	%
MOLD SHRINKAGE	D955	0.1-0.2	%	0.1-0.2	%
MECHANICAL					
TENSILE STRENGTH	D638	30,000	psi	207	MPa
ELONGATION, YIELD	D638	1-3	%	1-3	%
FLEXURAL STRENGTH	D790	43,000	psi	296	MPa
FLEXURAL MODULUS	D790	2,550,000	psi	17,582	MPa
SHEAR STRENGTH	D732				
IZOD IMPACT STRENGTH	D256				
NOTCHED 1/8"		1.2	ft.lb./in.	64	J/m
UNNOTCHED 1/8"		7	ft.lb./in.	373	J/m
ROCKWELL HARDNESS		R124	R Scale	R124	R Scale
THERMAL					
HDTUL	D648	600	°F	316	°C
@ 264 PSI					
COEFFICIENT OF LINEAR THERMAL EXPANSION	D696	1.4	in./in. F x10 ⁻⁵	2.52	mm/mm C 10 ⁻⁶
FLAMMABILITY ¹	U.L.Subj 94	V0@1/16	in	V0@1/16	mm
ELECTRICAL					
SURFACE RESISTIVITY		10e2 -10e6	ohms/sq	10e2 -10e6	ohms/sq
PROCESSING					
DRYING TEMPERATURE		300	°F	149	°C
DRYING TIME		4	hrs	4	hrs
MELT TEMPERATURE		660-740	°F	350- 390	°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

This information is based on our experience to date and we believe it to be reliable. It is intended only as a guide for use at your discretion and risk. We cannot guarantee favorable results and assume no liability in connection with its use of the products described. Each user bears full responsibility for making it's own determination as to the suitability of the product described. None of this information is to be taken as a license to operate under, or recommendation to infringe any patents.