



2079 Center Square Road
 Logan Township, NJ 08085
 Phone: 856-467-3030

TECHNICAL DATA AND PROCESS SHEET

10% CARBON FIBER REINFORCED HIGH FLOW PEEK

INELEC PEEKCF10HF

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	0.1	%	0.10	%
MOLD SHRINKAGE	D955	0.3-0.4	%	0.3-0.4	%
MECHANICAL					
TENSILE STRENGTH	D638	27,000	psi	186	MPa
ELONGATION, YIELD	D638	2-4	%	2-4	%
FLEXURAL STRENGTH	D790	31,500	psi	217	MPa
FLEXURAL MODULUS	D790	1,130,000	psi	7,791	MPa
SHEAR STRENGTH	D732				
IZOD IMPACT STRENGTH	D256				
NOTCHED 1/8"		1.1	ft.lb./in.	59	J/m
UNNOTCHED 1/8"		10	ft.lb./in.	533	J/m
ROCKWELL HARDNESS		R124	R Scale	R124	R Scale
THERMAL					
HDTUL @ 264 PSI	D648	590	°F	310	°C
COEFFICIENT OF LINEAR THERMAL EXPANSION	D696	2.1	in./in. F x10 ⁻⁵	3.78	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.