



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

TECHNICAL DATA AND PROCESS SHEET

20% CARBON FIBER REINFORCED HIGH FLOW PEEK

INELEC PEEKCF20HF

TYPICAL PROPERTIES

PROPERTY	ASTM METHOD	English	UNITS	Metric SI	UNITS
GENERAL					
SPECIFIC GRAVITY	D792	1.36		1.36	
SPECIFIC VOLUME		20.37	in ³ /lb	0.735	cm ³ /gm
WATER ABSORPTION (24 Hrs)	D570	0.1	%	0.10	%
MOLD SHRINKAGE	D955	0.2-0.3	%	0.2-0.3	%
MECHANICAL					
TENSILE STRENGTH	D638	33,000	psi	228	MPa
ELONGATION, YIELD	D638	1-3	%	1-3	%
FLEXURAL STRENGTH	D790	48,000	psi	331	MPa
FLEXURAL MODULUS	D790	2,400,000	psi	16,547	MPa
SHEAR STRENGTH	D732				
IZOD IMPACT STRENGTH	D256				
NOTCHED 1/8"		1.3	ft.lb./in.	69	J/m
UNNOTCHED 1/8"		11	ft.lb./in.	586	J/m
ROCKWELL HARDNESS		R124	R Scale	R124	R Scale
THERMAL					
HDTUL @ 264 PSI	D648	600	°F	316	°C
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		10e2-10e4	ohms/sq	10e2-10e4	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

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