



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

TECHNICAL DATA AND PROCESS SHEET

20% CARBON FIBER REINFORCED NYLON 6/6

INELEC PA66CF20

TYPICAL PROPERTIES

PROPERTY	ASTM		UNITS	Metric SI	UNITS
	METHOD	English			
GENERAL					
SPECIFIC GRAVITY	D792	1.23		1.23	
SPECIFIC VOLUME		22.52	in ³ /lb	0.813	cm ³ /gm
WATER ABSORPTION (24 Hrs)	D570	0.90	%	0.90	%
MOLD SHRINKAGE	D955	0.3-0.5	%	0.3-0.5	%
MECHANICAL					
TENSILE STRENGTH	D638	28,000	psi	193	MPa
ELONGATION, YIELD	D638	2-4	%	2-4	%
FLEXURAL STRENGTH	D790	43,000	psi	296	MPa
FLEXURAL MODULUS	D790	2,400,000	psi	16,547	MPa
SHEAR STRENGTH	D732				
IZOD IMPACT STRENGTH	D256				
NOTCHED 1/8"		1.2	ft.lb./in.	64	J/m
UNNOTCHED 1/8"		12	ft.lb./in.	640	J/m
ROCKWELL HARDNESS					
THERMAL					
HDTUL @ 264 PSI	D648	495	°F	257	°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	HB@1/16	in	HB@ 1.5	mm
ELECTRICAL					
SURFACE RESISTIVITY		10e ² -10e ⁴	ohms/sq	10e ² -10e ⁴	ohms/sq
PROCESSING					
DRYING TEMPERATURE		175	°F	79	°C
DRYING TIME		4	hrs	4	hrs
MELT TEMPERATURE		500-575	°F	260 - 301	°C
MOLD TEMPERATURE		200	°F	93	°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 - 0.025	mm

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