

TECHNICAL DATA AND PROCESS SHEET

30% CARBON FIBER REINFORCED ABS

INELEC ABSCF30

TYPICAL PROPERTIES

PROPERTY	ASTM		UNITS	Metric SI	UNITS
	METHOD	English			
GENERAL					
SPECIFIC GRAVITY	D792	1.19		1.19	
SPECIFIC VOLUME		23.28	in ³ /lb	0.840	cm ³ /gm
WATER ABSORPTION (24 Hrs)	D570	0.14	%	0.14	%
MOLD SHRINKAGE	D955	0.15-0.2	%	0.15-0.2	%
MECHANICAL					
TENSILE STRENGTH	D638	19,000	psi	131	MPa
ELONGATION, YIELD	D638	1-3	%	1-3	%
FLEXURAL STRENGTH	D790	24,000	psi	165	MPa
FLEXURAL MODULUS	D790	1,800,000	psi	12,411	MPa
SHEAR STRENGTH	D732	7,500	psi	52	MPa
IZOD IMPACT STRENGTH	D256				
NOTCHED 1/8"		1.1	ft.lb./in.	59	J/m
UNNOTCHED 1/8"		5	ft.lb./in.	267	J/m
ROCKWELL HARDNESS					
THERMAL					
HDTUL	D648	220	°F	104	°C
@ 264 PSI					
COEFFICIENT OF LINEAR THERMAL EXPANSION	D696	1.1	in./in. F x 10 ⁻⁵	1.98	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		170	°F	77	°C
DRYING TIME		4	hrs	4	hrs
MELT TEMPERATURE		400-550	°F	205- 288	°C
MOLD TEMPERATURE		180	°F	82	°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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