

**TECHNICAL DATA AND PROCESS SHEET**

**20% CARBON FIBER REINFORCED ABS**

**INELEC ABSCF20**

**TYPICAL PROPERTIES**

PROPERTY	ASTM		English	UNITS	Metric SI	UNITS
	METHOD					
<b>GENERAL</b>						
SPECIFIC GRAVITY	D792		1.13		1.13	
SPECIFIC VOLUME			24.51	in <sup>3</sup> /lb	0.885	cm <sup>3</sup> /gm
WATER ABSORPTION (24 Hrs)	D570		0.14	%	0.14	%
MOLD SHRINKAGE	D955		0.05-0.2	%	0.05-0.2	%
<b>MECHANICAL</b>						
TENSILE STRENGTH	D638		15,500	psi	107	MPa
ELONGATION, YIELD	D638		2-4	%	2-4	%
FLEXURAL STRENGTH	D790		22,000	psi	152	MPa
FLEXURAL MODULUS	D790		1,700,000	psi	11,721	MPa
SHEAR STRENGTH	D732					
IZOD IMPACT STRENGTH	D256					
NOTCHED 1/8"			1.2	ft.lb./in.	64	J/m
UNNOTCHED 1/8"			5.6	ft.lb./in.	298	J/m
ROCKWELL HARDNESS						
<b>THERMAL</b>						
HDTUL	D648		215	°F	102	°C
@ 264 PSI						
COEFFICIENT OF LINEAR THERMAL EXPANSION	D696					
FLAMMABILITY <sup>1</sup>	U.L.Subj 94		HB@1/16	in	HB@ 1.5	mm
<b>ELECTRICAL</b>						
SURFACE RESISTIVITY			10e <sup>2</sup> -10e <sup>4</sup>	ohms/sq	10e <sup>2</sup> -10e <sup>4</sup>	ohms/sq
<b>PROCESSING</b>						
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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