

TECHNICAL DATA AND PROCESS SHEET

20% GLASS FIBER REINFORCED ABS

INSTRUC ABSGF20

TYPICAL PROPERTIES

PROPERTY	ASTM METHOD	English	UNITS	Metric SI	UNITS
GENERAL					
SPECIFIC GRAVITY	D792	1.20		1.20	
SPECIFIC VOLUME		23.08	in ³ /lb	0.833	cm ³ /gm
WATER ABSORPTION (24 Hrs)	D570	0.15	%	0.15	%
MOLD SHRINKAGE	D955	0.15-0.2	%	0.15-0.2	%
MECHANICAL					
TENSILE STRENGTH	D638	13,500	psi	93	MPa
ELONGATION, YIELD	D638	3-4	%	3-4	%
FLEXURAL STRENGTH	D790	17,500	psi	121	MPa
FLEXURAL MODULUS	D790	850,000	psi	5,861	MPa
SHEAR STRENGTH	D732	7,000	psi	48	MPa
IZOD IMPACT STRENGTH	D256				
NOTCHED 1/8"		1.5	ft.lb./in.	80	J/m
UNNOTCHED 1/8"		6.5	ft.lb./in.	346	J/m
ROCKWELL HARDNESS		M97	M Scale	M97	M Scale
THERMAL					
HDTUL @ 264 PSI	D648	225	°F	107	°C
COEFFICIENT OF LINEAR THERMAL EXPANSION	D696	2	in./in. F x10 ⁻⁵	3.6	mm/mm C 10 ⁻⁶
FLAMMABILITY ¹	U.L.Subj 94	HB@1/16	in	HB@ 1.5	mm
ELECTRICAL					
SURFACE RESISTIVITY		10e ¹⁶	ohms/sq	10e ¹⁶	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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