

TECHNICAL DATA AND PROCESS SHEET

20% GLASS FIBER REINFORCED NYLON 6/6

INSTRUC PA66GF20

TYPICAL PROPERTIES

PROPERTY	ASTM METHOD	English	UNITS	Metric SI	UNITS
GENERAL					
SPECIFIC GRAVITY	D792	1.28		1.28	
SPECIFIC VOLUME		21.64	in ³ /lb	0.781	cm ³ /gm
WATER ABSORPTION (24 Hrs)	D570	0.90	%	0.90	%
MOLD SHRINKAGE	D955	0.5-0.6	%	0.5-0.6	%
MECHANICAL					
TENSILE STRENGTH	D638	19,000	psi	131	MPa
ELONGATION, YIELD	D638	2-4	%	2-4	%
FLEXURAL STRENGTH	D790	29,000	psi	200	MPa
FLEXURAL MODULUS	D790	1,100,000	psi	7,584	MPa
SHEAR STRENGTH	D732	10,600	psi	73	MPa
IZOD IMPACT STRENGTH	D256				
NOTCHED 1/8"		1.4	ft.lb./in.	75	J/m
UNNOTCHED 1/8"		8.5	ft.lb./in.	453	J/m
ROCKWELL HARDNESS		M93	M Scale	M93	M Scale
THERMAL					
HDTUL @ 264 PSI	D648	475	°F	246	°C
COEFFICIENT OF LINEAR THERMAL EXPANSION	D696	2.3	in./in. F x10 ⁻⁵	4.14	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		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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