

TECHNICAL DATA AND PROCESS SHEET

10% GLASS FIBER REINFORCED NYLON 6/6

INSTRUC PA66GF10

TYPICAL PROPERTIES

PROPERTY	ASTM METHOD	English	UNITS	Metric SI	UNITS
GENERAL					
SPECIFIC GRAVITY	D792	1.21		1.21	
SPECIFIC VOLUME		22.89	in ³ /lb	0.826	cm ³ /gm
WATER ABSORPTION (24 Hrs)	D570	1.10	%	1.10	%
MOLD SHRINKAGE	D955	0.8-0.9	%	0.8-0.9	%
MECHANICAL					
TENSILE STRENGTH	D638	16,000	psi	110	MPa
ELONGATION, YIELD	D638	2-4	%	2-4	%
FLEXURAL STRENGTH	D790	20,000	psi	138	MPa
FLEXURAL MODULUS	D790	700,000	psi	4,826	MPa
SHEAR STRENGTH	D732	10,000	psi	69	MPa
IZOD IMPACT STRENGTH	D256				
NOTCHED 1/8"		0.8	ft.lb./in.	43	J/m
UNNOTCHED 1/8"		7	ft.lb./in.	373	J/m
ROCKWELL HARDNESS		M92	M Scale	M92	M Scale
THERMAL					
HDTUL	D648	465	°F	241	°C
@ 264 PSI					
COEFFICIENT OF LINEAR THERMAL EXPANSION	D696	2.7	in./in. F x10 ⁻⁵	4.86	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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