

TECHNICAL DATA AND PROCESS SHEET

10% GLASS FIBER REINFORCED PBT

INSTRUC PBTGF10

TYPICAL PROPERTIES

PROPERTY	ASTM METHOD	English	UNITS	Metric SI	UNITS
GENERAL					
SPECIFIC GRAVITY	D792	1.38		1.38	
SPECIFIC VOLUME		20.07	in ³ /lb	0.725	cm ³ /gm
WATER ABSORPTION (24 Hrs)	D570	0.1	%	0.10	%
MOLD SHRINKAGE	D955	0.7-1.1	%	0.7-1.1	%
MECHANICAL					
TENSILE STRENGTH	D638	11,500	psi	79	MPa
ELONGATION, YIELD	D638	3-5	%	3-5	%
FLEXURAL STRENGTH	D790	19,000	psi	131	MPa
FLEXURAL MODULUS	D790	600,000	psi	4,137	MPa
SHEAR STRENGTH	D732				
IZOD IMPACT STRENGTH	D256				
NOTCHED 1/8"		1.1	ft.lb./in.	59	J/m
UNNOTCHED 1/8"		4	ft.lb./in.	213	J/m
ROCKWELL HARDNESS		M80	M Scale	M80	M Scale
THERMAL					
HDTUL @ 264 PSI	D648	340	°F	171	°C
COEFFICIENT OF LINEAR THERMAL EXPANSION	D696	1.6	in./in. F x10 ⁻⁵	2.88	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		230	°F	110	°C
DRYING TIME		4	hrs	4	hrs
MELT TEMPERATURE		430-500	°F	220- 260	°C
MOLD TEMPERATURE		225	°F	107	°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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