Engineered Compounds
tel 856.467.3030 fax 856.467.3033
2079 Center Square Road Swedesboro, NJ 08085

TECHNICAL DATA AND PROCESS SHEET

30% GLASS FIBER REINFORCED POLYETHERSULFONE

INSTRUC PESGF30

TYPICAL PROPERTIES

PROPERTY	ASTM METHOD	English	UNITS	Metric SI	UNITS
GENERAL					
SPECIFIC GRAVITY	D792	1.60		1.6	
SPECIFIC VOLUME		17.3	in^3/lb	0.625	cm^3/gm
WATER ABSORPTION (24 Hrs	D570	0.3	%	0.30	%
MOLD SHRINKAGE	D955	0.2-0.3	%	0.2-0.3	%
MECHANICAL					
TENSILE STRENGTH	D638	20,300	psi	140	MPa
ELONGATION, YIELD	D638	1-3	%	1-3	%
FLEXURAL STRENGTH	D790	28,000	psi	193	MPa
FLEXURAL MODULUS	D790	1,200,000	psi	8,274	MPa
SHEAR STRENGTH	D732				
IZOD IMPACT STRENGTH	D256				
NOTCHED 1/8"		1.6	ft.lb./in.	85	J/m
UNNOTCHED 1/8"		12	ft.lb./in.	640	J/m
ROCKWELL HARDNESS		M98	M Scale	M98	M Scale
THERMAL					
HDTUL @ 264 PSI	D648	420	°F	216	°C
COEFFICIENT OF LINEAR THERMAL EXPANSION	D696	1.3	in./in. F $x10^{-5}$	2.34	mm/mm C 10^{-6}
FLAMMABILITY[1]	U.L.Subj 94	V0@1/16	in	V0@1.5	mm
ELECTRICAL					
SURFACE RESISTIVITY		$10e^{16}$	ohms/sq	$10e^{16}$	ohms/sq
PROCESSING					
DRYING TEMPERATURE		300	°F	149	°C
DRYING TIME		4	hrs	4	hrs
MELT TEMPERATURE		650-715	°F	343 - 380	°C
MOLD TEMPERATURE		300	°F	149	°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