



Material Properties Comparison Chart

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Material Name	Specific Gravity	Elongation Break	Tensile Strength	Flexural Strength	Coefficient Linear Thermal Expansion	Heat Deflection Temperature	Maximum Recommended Use Temperature	Thermal Conductivity	Flammability Rating
	SpG	TEB %	Tens MPa	Flex MPa	CTE %	HTD °F	Tmax °F	Tcon Ωm	UL94
FEP	2.15	325	4000	no break	5.00	140	400	1.74	V-O
PFA	2.15	300	5000	no break	6.60	163	500	1.30	V-O
PEI 1000	1.28	80	16500	20000	3.10	392	340	1.53	V-O
PEI 30% Glass 2300	1.51	3	17000	30000	1.10	410	340	2.01	V-O
PAI (TORLON™) Unfilled 4203	1.42	15	18000	24000	1.70	532	500	1.80	V-O
PAI (TORLON™) Bearing 4301	1.46	7	12000	23000	1.40	534	500	3.70	V-O
PAI (TORLON™) Glass Filled 5530	1.51	7	15000	20000	2.60	520	500	2.50	V-O
PEEK 450G	1.31	20	16000	25000	2.60	320	480	1.80	V-O
PEEK 30% Glass Filled 450GL30	1.51	2	22800	33800	1.20	600	480	3.00	V-O
PEEK 30% Carbon Filled 450CA30	1.40	1	26000	38000	1.00	550	500	6.40	V-O
PEEK 30% Carbon Filled 450FC30	1.44	3	11000	27500	1.70	385	485	1.70	V-O
PEEK 30% Carbon Filled XH1005	1.31	6	10200	14600	2.70	482	450	1.60	V-O

Design Recommendation Disclaimer:

PPL is offering no recommendation on application design and material selection. Each user should conduct evaluations to determine the suitability for their particular application.

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