

EPTAM Plastics
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SEMICONDUCTOR MATERIAL PROPERTIES

Material	Applications	Typical Properties	Flammability	Maximum Continuous Temp.	Compressive Strength 73°F 10% Deformation PSI	Tensile Strength 73°F PSI	Flexural Strength 73°F PSI	Coefficient of linear thermal expansion in./ in / °F	Rockwell hardness D.R&M	Dielectric strength short term VPM	Dielectric constant 60HZ	Water Absorption 24 hr %
Acetron GP	Manifolds	good machining	UL 94 HB	180° F	15000	9500	12000	5.4 x 10 ⁻⁵	m-88	420	3.8	0.2
Acrylic	Lenses, Windows	Clear, polishable	UL 94 HB	180° F	11000/19000	8000/1000	17000	4.0 x 10 ⁻⁵	m-90	400	N/A	0.3
Celazole	Rings	High Temp.	UL 94 VO	650° F	50000	23000	32000	1.3 x 10 ⁻⁴	m-125	550	-	0.4
Delrin	Mechanical	good wear strength	UL 94 HB	180° F	16000	11000	13000	4.7 x 10 ⁻⁵	m-85	450	3.7	0.2
Ertalyte	Manifolds, Watertracks	Chemical resistance, wear	UL 94 HB	210° F	1500	12400	18000	3.3 x 10 ⁻⁵	m-93	385	-	0.07
Noryl	Carrier Plates	Low moisture absorption	UL 94 VO	220° F	16000	9200	14400	3.3 x 10 ⁻⁵	r-119	500	2.7	0.07
PEEK	Retaining rings	Chemical resistance	UL 94 VO	480° F	20000	16000	25000	2.6 x 10 ⁻⁵	m-100	480	3.3	.10
Polycarbonate	Windows, Guards	clear, formable	UL 94 V-2	266° F	12500	9000	14000	3.8 x 10 ⁻⁵	m-73	380	3.17	.15
Semitron ESD 225	Water Combs	static dissipative 10 ⁴ -10 ⁶	UL 94 HB	500° F	8000	5400	7300	9.3 x 10 ⁻⁵	m-50	N/A	-	2.0
Semitron ESD 410	Inserts	static dissipative 10 ¹¹ -10 ⁶	UL 94 VO	500° F	19500	9000	12000	1.8 x 10 ⁻⁵	m-115	N/A	-	.30
Teflon	Adapters, Wear Strips	Lubricity	UL 94 V-2	500° F	1700	3000	N/A	N/A	m-55	450	2.1	.10
Torlon 4203	Bushings	High Temp wear	UL 94 VO	500° F	28000	18000	24000	1.7 x 10 ⁻⁵	m-120	580	3.9	.40
UHMW	Housings	Chemical resistance	UL 94 HB	250° F		3000	N/A	N/A	d-515	N/A	-	.50
Ultem 1000	Adapter Blocks	High Temp.	UL 94 VO	340° F	22000	16500	20000	3.1 x 10 ⁻⁵	m-112	830	3.15	.25
Ultem 2300	Adapter Blocks	High Temp.	UL 94 VO	340° F	32000	17000	30000	1.1 x 10 ⁻⁵	m-114	770	3.7	.18
Vespel SP - 1	Bushings	High Temp. low outgassing	UL 94 VO	680° F	16300	16300	45000	3.0 x 10 ⁻⁶	d-150	560	3.55	.24