THE GUND COMPANY

MANUFACTURERS & FABRICATORS OF ENGINEERED MATERIAL SOLUTIONS

ENGINEERING RESOURCE

METALS PROCESSING MATERIAL COMPARATIVE DATA SHEET

Product Grades	The Gund. Co	Arboron	XX/XXX		C/CE		LE	GPO-3	N220	G-9	G-10	G-11	G-7	Mica M	Mica P	Transite HT	NAD-11	Transite 1000
	NEMA	--	--		--		LE	GPO-3	GPO-1	G-5 / G-9	G-10	G-11	G-7	--	--	--	--	--
	IEC	--	PFCP 203 / 204		PFCC 201 / 203		PFCC 305	UPGM 203	UPGM 201	MFGC 201	EPGC 201	EPGC 308	SIGC 201	--	--	--	--	--
Type of Material		HPL*	HPL*		HPL*		HPL*	LPL*	LPL*	HPL*	HPL*	HPL*	HPL*	HPL*	HPL*	Cement Board	Cement Board	Cement Board
Construction		Paper Phenolic	Paper Phenolic		Cotton Phenolic		Linen Phenolic	Glass Polyester	High-Temp Glass Polyester	Glass Melamine	Glass Epoxy Non-Brominated	Glass Epoxy Non-Brominated	Glass Silicone	Mica M Paper Silicone	Mica P Paper Silicone	Monolithic Non-asbestos Fiber Cement	Monolithic Non-asbestos Fiber Cement	Monolithic Non-asbestos Fiber Cement
Standard Thickness Available		0.125"-1.250"	0.008"-4.000"		0.008"-4.000"		0.0008"-4.000"	0.094"-2.000"	0.031"-2.000"	0.008"-6.000"	.006"-6.000"	0.010"-6.000"	0.125"-6.000"	0.004"-3.000"	0.004"-3.000"	0.25"-3.00"	0.5"-4.0"	0.5"-3.0"
Mechanical Properties	**Units**		XX	XXX	C	CE												
Rockwell Hardness	M Scale	113	95	101	100	100	100	100	100	115	98	115	100	--	--	--	--	--
Tensile Strength LW	ksi	22	13.5	14	12	11	13	9	11	44	43	41	--	28.3	16	--	--	--
Tensile Strength CW	ksi	14	11.5	12	--	9	--	--	--	34	39	--	--	--	--	--	--	--
Compressive Strength	ksi	45	25	30	34	34	36	33	32	70	44	70	45	57.5	48	10.4	17	13.4
Flexural Strength, Lengthwise & Crosswise LW	ksi	30	22	20	18	17.5	22	23	21	61	80	80	18	24.1	--	--	--	--
Flexural Strength, Lengthwise & Crosswise CW	ksi	24	17	15	17	15	16	20	--	51	70	70	15	--	--	--	--	--
Shear Strength	ksi	13	11.5	12.8	14	14	13.5	14	12	18	19	--	--	--	--	--	--	--
IZOD Impact Strength, LW	ft.-lbs./in.²	0.5	0.50	0.55	1.95	1.95	1.35	9	11.0	12.5	15	11	17.0	--	--	--	--	--
Bonding Strength	lbs.	660	1,000	1,000	2,500	1,700	1,900	1,400	1,200	1,900	2,300	2,200	750	--	--	--	--	--
Electrical Properties	**Units**																	
Arc Resistance	Seconds	88	--	--	15	15	15	190	180	185	130	185	200	--	≥420	260	370	272
Dielectric Strength ⊥	V/mil	129	500	700	400	550	50	450	550	540	485	485	350	629	625	35	69	56
Breakdown Voltage ∥	kV	60	40	40	20	40	40	45	50	65	50	65	55	--	--	--	--	--
Surface Resistivity	Ohms/Sq.	>600	--	--	--	--	--	>600	>600	>400	200	--	--	--	--	--	--	--
Physical Properties	**Units**																	
Water Absorption	%	0.90	2.0	1.30	3.5	2.0	1.9	0.25	0.25	0.60	0.02	0.1	0.19	0.65	<1.0	21	15	21
Specific Gravity	g/cc	1.38	--	--	1.37	1.37	--	1.8	1.69	--	1.85	1.9	0.19	--	2.1	1.6	1.74	1.58
Thermal Properties	**Units**																	
Relative Temperature Index	°C	95	130	130	125	125	125	130	210	130	130	180	250	500	700	230	500	538
Flame Resistance	Class	UL 94 V-0	UL 94 HB		UL 94 HB		UL 94 HB	UL 94 V-0	E323105	UL 94 V-0	UL 94 HB	UL 94 HB	UL 94 V-0	UL 94V-0	UL 94V-0	--	--	--
Thermal Class	Class	--	B		--		--	B	N	B	B	H	--	--	--	R	--	--

* HPL: High Pressure Laminate, LPL: Low Pressure Laminate