



# 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"-3.000"	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	115	98	115	100	--	--	--	--	--	
Tensile Strength Lengthwise & Crosswise	LW	ksi	22	13.5	14	12	11	13	9	11	44	43	41	--	28.3	16	--	--	
	CW		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	--	--	--	--
	CW		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. <sup>2</sup>	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 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

All of the information, suggestions, and recommendations pertaining to the properties and uses of the products herein are based upon tests and data believed to be accurate; however, the final determination regarding the suitability of any material described herein for the use contemplated, the manner of such use, and whether the use infringes any patents is the sole responsibility of the user. There is no warranty expressed or implied, including, without limitation, warranty of merchantability or fitness for a particular purpose. The Gund Company will not be liable for incidental or consequential loss or damage.