



THE GUND COMPANY

MANUFACTURERS & FABRICATORS OF ENGINEERED MATERIAL SOLUTIONS

METALS PROCESSING MATERIAL COMPARATIVE DATA SHEET

Product Grades		TGC	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*	HPL*	HPL*	HPL*	HPL*	HPL*	HPL*	HPL*	HPL*	HPL*	HPL*	HPL*	Cement Board	Cement Board	Cement Board
Construction		Paper Phenolic		Paper Pehnolic		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 M Paper Silicone	Monolithic Non-asbestos Fiber Cement	Monolithic Non-asbestos Fiber Cement	Monolithic Non-asbestos Fiber Cement	
Standard Thickness Available		in	0.125 - 1.250		0.008 - 4.000		0.008 - 4.000		0.008 - 4.000	0.094 - 2.000	0.031 - 2.000	0.008 - 6.000	0.006 - 5.000	0.010 - 6.000	0.125 - 6.000	0.004 - 3.000	0.004 - 3.000	0.250 - 3.000	0.500 - 4.000	0.500 - 3.000
		cm																		
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, Lengthwise and Crosswise	LW	ksi	22	13.5	14	12	11	13	9	11	44	43	41	--	28.3	16	--	--	--	
	CW		14	11.5	12	--	9	--	--	--	--	--	--	--	--	--	--	--		
Compressive Strength		ksi	45	25	30	34	34	36	33	32	70	44	50	45	57.5	48	10.4	17	13.4	
Flexural Strength, Lengthwise and Crosswise	LW	ksi	30	22	20	18	17.5	22	23	21	61	63	80	18	24.1	24.1	--	--	--	
	CW		24	17	15	17	15	16		51	70	54	15	--	--	--	--	--		
Shear Strength		ksi	13	11.5	12.8	14	14	13.5	14	12	18	19	21	--	--	--	--	--	--	
IZOD Impact Strength, LW		ft-lbs./in. ²	0.5	0.5	0.55	1.95	1.95	1.35	9	11	12.5	8.4 ¹	18	17	--	--	--	--	--	
Bonding Strength		lbs.	660	1000	1000	2500	1700	1900	1200	1900	2300	2200	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	47 ²	65	55	--	--	--	--	--	
Surface Resistivity		Ohms/Sq.	>600	--	--	--	--	--	>600	>600	>400	200	--	--	--	--	--	--	--	
Physical Properties		Units																		
Water Absorption		%	0.9	2	1.3	3.5	2	1.9	0.25	0.25	0.6	0.13	0.01	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	1.8	0.19	--	2.1	11.6	1.74	1.58	
Thermal Properties		Units																		
Relative Temprature Index		°C	95	130	130	125	125	125	130	210	130	130	130	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 V-0	UL 94 HB	UL 94 V-0	UL 94 V-0	UL 94 V-0	--	--	--	
Thermal Class		Class	--	B		--	--	--	B	N	B	B	F	--	--	--	R	--	--	

¹: Material Property Cond. D48/50 at 3 mm Notched

²: Material Property Cond. A at 3 mm

Data supplied above are typical values and are not to be considered specification values. 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 suitability of any material described herein for the contemplated application, 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. Under no circumstances shall we be liable for incidental or consequential loss or damage.