



January, 1975
New Information
Mailed to: E, D, C/2183/PL,DB

Flexible Composites

Cellulose Paper Composites

Rag Paper – Electrical grade rag papers are made from cotton fibers by a process expressly designed to produce a high density, uniform sheet. Because of their high density, these papers have excellent tear resistance and good electric strength. Electrical grade rag papers are available in gauges from .004" through .025".

Fish Paper – Fish paper is made from high quality rag paper by a chemical process using zinc chloride. It has a harder surface and is stiffer than ordinary rag paper. Fish paper has excellent forming qualities and good electric strength. It is available in gauges of from .004" to .030".

Kraft Paper – Kraft is a low cost electrical paper made from wood pulp. It is used in applications where high mechanical strength is not required.

Paper/Polyester Film – These composites are available in both two ply and three ply combinations. For general purpose applications, the composites are bonded with adhesives which have good solvent resistance and heat stability. For hermetic motors, the constructions are bonded with adhesives formulated to resist the effects of refrigerants.

Two ply combinations are normally used in small units where the optimum in space savings is desired. Three ply combinations of the paper/film/paper type are used in larger units where mechanical protection of the film is important and space is not critical. Three ply constructions of the film/paper/film type are used in specialized applications where moisture resistance and surface resistivity is of prime importance.

Product	Composite thickness ASTM D374 (Inches)	Yield Sq. Yds./ Lb.	Lbs./Sq. Yd.	Dielectric Strength ASTM D149 (2 In. Dia. Electrodes) (Volts)	Volume Resistivity① ASTM D257 (ohm/cm)	Surface Resistivity① ASTM D257 (ohms)	Tensile Strength ASTM D828		Tear Strength Graves	
							M.D. Lbs./In. of Width	C.M.D.	M.D. (Lbs.)	C.M.D.
Rag/Polyester Film										
RM-72	0.009	1.67	0.60	9,000	10 ¹⁴	10 ¹²	148	105	10	8
RM-101	0.011	1.38	0.72	6,500	10 ¹⁴	10 ¹²	170	90	12	10
RM-102	0.012	1.23	0.81	9,000	10 ¹⁴	10 ¹³	194	127	14	11
RM-152	0.017	0.91	1.10	12,000	10 ¹⁴	10 ¹²	291	147	22	18
Rag/Polyester Film/Rag										
RMR-424	0.011	1.40	0.71	9,900	10 ¹⁴	10 ¹²	155	85	12	10
RMR-525	0.013	1.32	0.76	12,740	10 ¹⁴	10 ¹²	180	110	21	16
RMR-535	0.014	1.22	0.82	10,000	10 ¹⁴	10 ¹²	220	130	28	14
RMR-555	0.016	1.08	0.93	16,340	10 ¹⁴	10 ¹²	250	165	21	18
RMR-727	0.017	0.99	1.01	12,000	10 ¹⁴	10 ¹²	240	130	30	23
RMR-737	0.018	1.09	0.92	12,000	10 ¹⁴	10 ¹²	260	135	23	18
RMR-10210	0.022	0.72	1.39	12,200	10 ¹⁴	10 ¹²	335	165	30	23
Polyester Film/Rag/Polyester Film										
MRM-171	0.010	1.58	0.63	9,500	10 ¹⁴	10 ¹²	156	75	25	61
MRM-1101	0.013	1.22	0.82	9,700	10 ¹⁴	10 ¹²	175	106	15	11
MRM-1151	0.018	0.91	1.10	12,500	10 ¹⁴	10 ¹²	302	145

① Values obtained were greater than values shown.

This Company has no control over the final application of the product by others, therefore, the information contained herein is intended as a general guide to product use and should not be construed as a warranty.