THE GUND COMPANY

MANUFACTURERS & FABRICATORS OF ENGINEERED MATERIAL SOLUTIONS

G-Flex™ YT510

High-Temperature Aramid Paper

G-Flex™ YT510 is a group of insulation aramid papers that offer high dielectric strength, mechanical toughness, flexibility, and resilience. It is available in thicknesses ranging from 0.05 mm to 0.75 mm (2 mil to 30 mil). G-Flex™ YT510 is widely used in a majority of electrical equipment applications. It can be used in almost any electrical product where an electrical insulation sheet form is necessary. G-Flex™ YT510 exhibits exceptional electrical, mechanical, and thermal properties comparable to all alternatives today. The table below shows the typical data for significant electrical, mechanical, and thermal properties by standard thickness.

RTI: 210°C | UL EIS Thermal Class R (220°C)
UL File number: E521153
Meets ANSI/NEMA FI 3-2004 - superseding MIL-1-24204A
COMMON APPLICATIONS: GROUND, INTER-WINDING AND MINOR SHEET INSULATION

		ASTM/IEC		TYPICAL VALUES								
PROPERTIES		Test Method	Units	YT510RL0002	YT510RL0003	YT510RL0005	YT510RL0007.5	YT510RL0010	YT510RL0012	YT510RL0015	YT510RL0020	YT510RL0030
PHYSICAL	Standard Thickness		mil	2	3	5	7	10	12	15	20	30
	Standard Thickness		mm	0.05	0.08	0.128	0.18	0.25	0.3	0.38	0.51	0.76
	Base Weight	ASTM D646	g/m²	42	66	116	170	252	291	376	510	710
	Density		g/cc	0.80	0.83	0.91	0.94	0.99	1.00	0.99	1.00	0.93
MECHANICAL	Tensile Strength: MD	ASTM D828	N/cm	47	71	132	200	290	340	420	500	650
	Tensile Strength: CD	ASTM D828	N/cm	20	31	64	75	120	155	250	345	450
	Elongation: MD	ASTM D828	%	9	9	10	12	12	11	12	13	13
	Elongation: CD	ASTM D828	%	7	9	12	13	14	11	13	13	12
	Elmendorf Tear: MD	TAPPI 414	N	0.9	1.7	3.2	3.5	5.0	6.5	10.0	13.0	N/A
	Elmendorf Tear: CD	TAPPI 414	N	1.8	3.3	6.7	4.8	6.0	8.0	13.5	16.0	N/A
	Initial Tear Strength: MD	ASTM D1004	N	19	29	-	-	79	-	115	-	-
	Shrinkage: MD at 300°C	IEC 60819-2	%	4	≤5	4	3	3	3	3	3	3
	Shrinkage: CD at 300°C	IEC 60819-2	%	3	≤3	1.95	2.5	2.5	2.5	2.5	2	2
ELECTRICAL	Breakdown Voltage	ASTM D149	kV	0.9	1.5	3.0	3.9	6.3	6.4	9.0	8.0	13.5
	Dielectric Strength	ASTM D149	V/mil	465	465	597	533	635	560	580	533	482
	Dielectric Strength	ASTM D149	kV/mm	18	18	24	21	25	22	23	21	18
	Full Wave Impulse	ASTM D3426	V/mil	1,000	1,000	1,242	1,400	1,600	N/A	1,400	1,400	1,250
	Full Wave Impulse	ASTM D3426	kV/mm	39	39	49	55	63	N/A	55	55	49
	Dielectric Constant	ASTM D150	60 Hz	1.5	1.5	2.1	2.7	2.7	2.9	3.2	3.4	3.7
	Dissipation Factor	ASTM D150	60 Hz ($x10^{-3}$)	4	5	6	6	6	7	7	7	7

The Gund Company fabricates insulation materials to the exact specifications and drawings specified by our customers. We offer our customers the proper product for their specific application. A variety of dimensions and diameter sizes are available. Product colors vary according to material type.

G-FLEX™ FLEXIBLE INSULATION SOLUTIONS

The data supplied are typical values. They are not to be considered specification values. All of the information, suggestions, and recommendations about these properties and uses of the products herein are based on tests and data believed to be accurate; however, the final determination regarding the 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, warranties of merchantability or fitness for a particular purpose. Under no circumstances shall we be liable for incidental or consequential loss or damage.