



THE GUND COMPANY

MANUFACTURERS & FABRICATORS OF ENGINEERED MATERIAL SOLUTIONS

YT511

G-FLEXTM
FLEXIBLE INSULATION SOLUTIONS

Item:	G-Flex Meta-Aramid Paper YT511
Description:	G-Flex YT511 is the uncalendared version of YT510, giving it a lower density and increased absorption characteristics. It has the same chemical composition and thermal performance as G-Flex YT510.
Applications:	It is used in applications such as motor phase insulation and transformer coil end filler. The lower density and high conformability of G-Flex YT511 offers increased impregnability and saturability when compared to YT510, making it suitable for use in oil filled applications as well as cast core transformers or other applications where high saturation of resin is desirable.
Benefits:	The G-Flex YT511 exhibits exceptional electrical, mechanical, and thermal properties compared to all the alternatives in the market today. The table shows the typical data for major electrical, mechanical, and thermal properties by standard thickness.
UL File #:	E521153

YT511 Typical Data							Test Method	Equivalent Test Standard
Nominal Thickness	mil	5	7	10	15	23	--	--
	mm	0.13	0.18	0.25	0.38	0.58		
Typical Thickness	mm	0.13	0.17	0.25	0.39	0.60	GB/T451.3-2002	ASTM D374
Basis Weight	g/m ²	42	64	80	140	205	GB/T451.3-2002	ASTM D646
Density	g/cc	0.31	0.37	0.32	0.35	0.34	--	--
Tensile Strength, N/cm	MD	25	40	45	62	94	GB/T12914-2008	ASTM D882
	CD	13	20	32	48	75		
Elongation, %	MD	3.3	3.7	3.5	3.0	4.0		
	CD	4.5	5.0	4.5	3.7	5.0		
Elmendorf Tear Strength, N	MD	1.2	1.8	2.0	4.5	8.5	GB/T455-2002	TAPPI 414
	CD	1.8	3.0	3.5	7.0	9.0		
Dielectric Strength	V/mil	229	229	203	203	178	GB/T1408.1-2006	ASTM D419
	kV/mm	9	9	8	8	7		
Dielectric Constant	at 50Hz	1.3	1.3	1.3	1.4	1.4	GB/T1409-2006	ASTM D150
Dissipation Factor	50Hz (× 10 ⁻³)	4	4	4	5	5		
Relative Temp. Index (RTI)	°C	210	210	210	210	210	--	UL746B

MD=Machine Direction, CD=Cross Direction.

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.



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G-Flex™ Meta-Aramid Paper

G-Flex™ is The Gund Company's brand of Meta-Aramid paper. We apply our broad engineering and application knowledge, extensive testing, and global relationships to bring our customers the G-Flex™ Meta-Aramid Paper.

Manufactured from 100% aramid fibers, G-Flex™ Meta-Aramid paper YT510 carries a Temperature Index (TI) of 210°C, a VTM-O Flame Rating, and full UL approval (File #: E521153). It offers high inherent dielectric strength, mechanical toughness, flexibility, and resilience. Applications for G-Flex™ include stator slot liners, phase insulations, coil wrap, conductor wrap, and other insulation applications for the electrical industry.

G-FLEX™ META-ARAMID PAPER BENEFITS

- **Heat Resistance:** G-Flex™ Meta-Aramid paper has long-lasting thermal stability. It can be used for many hours at high temperatures while maintaining excellent dimensional stability. It will not embrittle, soften, or melt when exposed temporarily at high temperatures of 300°C.
- **Flame Resistance:** G-Flex™ Meta-Aramid paper is inherently flame resistant. It does not self-burn or melt in the room air, is not combustion-supporting, and has self-extinguishing properties.
- **Electrical Insulation:** The Meta-Aramid fiber has very good electrical insulation properties. The dielectric strength of Meta-Aramid paper is more than 20kV/mm.
- **Chemical Stability:** Meta-Aramid fiber has a very stable chemical structure.
- **Strong Resistance:** Resistant to most strong inorganic acids and alkalis at room temperature.
- **Relative Thermal Index (RTI):** 210°C
- **UL EIS Thermal Class:** 220°C
- **Sold Worldwide:** Directly from The Gund Company and readily available in 12 locations.
- **UL-certified product:** File # E521153
- **Excellent Properties:** Superior Dielectric Breakdown strength
- **Additional thicknesses are available upon request.**



COMMON APPLICATIONS FOR G-FLEX™ META-ARAMID PAPERS

- Stator Slot Liners
- Coil Wraps
- Formed Slot liners
- Formed Top Sticks
- Wire Wraps
- Slit into Tape Widths
- Phase Insulation
- Pole Collars
- Laminate Insulation



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Material Data Sheet