

# 3M™ ThermaVolt AR 30 mil Electrical Insulating Paper

Data Sheet

January 2014

ThermaVolt AR Electrical Insulating Paper is an electrical insulation for motors, generators and transformers. ThermaVolt AR exhibits good mechanical properties, specifically tensile and tear strength. High inorganic content helps to maintain long-term temperature stability. ThermaVolt AR paper is qualified for use as major ground insulation in electrical insulation systems rated through Class 220(R) per UL 1446 and IEC Std. 61857. Applications include ground and layer insulation in dry-type transformers, as well spiral-wound core tubes and interwinding insulation in strip-wound coils and electromagnet coils. 3M UL Recognized Insulation Systems may be found under UL File E65007.

		ASTM Test Method	ThermaVolt AR 30 mil
Nominal Thickness	mm mil	D-645	0.71 30
Basis Weight	g/m <sup>2</sup> lb/yd <sup>2</sup>	D-202	1032 1.9
Tensile Strength, MD	lb/inch N/cm	D-828	319 559
Tensile Strength, CD	lb/inch N/cm	D-828	152 266
Tensile Elongation, MD	%	D-828	3.9
Tensile Elongation, CD	%	D-828	3.6
Elmendorf Tear, MD	g N	D-689	1718 16.8
Elmendorf Tear, CD	g N	D-689	>3200 >31.4
Dielectric Breakdown Voltage	kV	D-149	14.8

## Important Notice

All statements, technical information, and recommendations related to 3M's products are based on information believed to be reliable, but the accuracy or completeness is not guaranteed. Before using this product, you must evaluate it and determine if it is suitable for your intended application. You assume all risks and liability associated with such use. Any statements related to the product, which are not contained in 3M's current publications, or any contrary statements contained on your purchase order, shall have no force or effect unless expressly agreed upon, in writing, by an authorized officer of 3M.

## Warranty; Limited Remedy; Limited Liability

This product will be free from defects in material and manufacture at the time of purchase. 3M MAKES NO OTHER WARRANTIES INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. If this product is defective within the warranty period stated above, your exclusive remedy shall be, at 3M's option, to replace or repair the 3M product or refund the purchase price of the 3M product. Except where prohibited by law, 3M will not be liable for any indirect, special, incidental or consequential loss or damage arising from this 3M product, regardless of the legal theory asserted.

3M is a trademark of 3M Company.



Electrical Markets Division  
6801 River Place Blvd.  
Austin, Texas 78726-9000  
855 293 6018  
FAX 800 828 9329  
[www.3M.com/flexibleinsulation](http://www.3M.com/flexibleinsulation)

.....  
Please recycle  
© 3M 2014 All rights reserved  
78-8141-6748-8 Rev A

