

# 3M™ TufQUIN TFT 5-14-5 Triplex Electrical Insulation Paper

Data Sheet

August 2012

3M™ TufQUIN TFT Triplex Electrical Insulation Paper is TufQUIN Hybrid Insulating Paper bonded to both sides of polyester (PET) film. TufQUIN TFT Paper is qualified for use as major ground insulation in electrical insulation systems rated through Class 200(N) per UL 1446 and IEC Std. 61857. It is suitable for applications including slot cell, phase, and wedge insulation in motors and generators as well as ground and layer insulation in dry-type transformers. TufQUIN TFT laminates are well-suited for automatic insertion applications, as well as heavy-duty winding applications. 3M Innovative Paper Technologies UL Recognized Insulation Systems (File No. 65007) may be found on UL's Electrical Insulation Systems Database at <http://www.ul.com/eis>.

		ASTM Test Method	TufQUIN TFT 5-14-5
Nominal Thickness	mm mil	D-645	0.61 24
Basis Weight	g/m <sup>2</sup> lb/yd <sup>2</sup>	D-202	799 1.47
Tensile Strength, MD	lb/inch N/cm	D-828	275 481
Tensile Strength, CD	lb/inch N/cm	D-828	321 562
Tensile Elongation, MD	%	D-828	31
Tensile Elongation, CD	%	D-828	152
Elmendorf Tear, MD	g N	D-689	1500 14.7
Elmendorf Tear, CD	g N	D-689	3340 32.7
Dielectric Breakdown Voltage	kV	D-149	30

## 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  
1 Paper Trail  
Tilton, NH 03276-5250  
866.357.2737  
FAX: 603.286.4859  
[www.3M.com/flexibleinsulation](http://www.3M.com/flexibleinsulation)

Please recycle  
© 3M 2012 All rights reserved  
78-8141-5595-4 Rev A

