

# 3M™ ThermaVolt AR 20 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 20 mil
Nominal Thickness	mm mil	D-645	0.51 20
Basis Weight	g/m <sup>2</sup> lb/yd <sup>2</sup>	D-202	668 1.2
Tensile Strength, MD	lb/inch N/cm	D-828	234 410
Tensile Strength, CD	lb/inch N/cm	D-828	102 179
Tensile Elongation, MD	%	D-828	4.5
Tensile Elongation, CD	%	D-828	3.7
Elmendorf Tear, MD	g N	D-689	1276 12.5
Elmendorf Tear, CD	g N	D-689	2752 27.0
Dielectric Breakdown Voltage	kV	D-149	8.6

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