## 3M<sup>™</sup> CeQUIN IF 10+1 Laminate

## **Duplex Electrical Insulating Paper**

Data Sheet July 2010

CeQUIN IF is CeQUIN inorganic based insulating paper bonded to polyester (PET) film. CeQUIN IF is qualified for use as major ground insulation in electrical insulation systems rated through Class 220(R) per UL 1446 and IEC Std. 61857. It is suitable for applications including ground and layer insulation in dry-type transformers, as well as spiral-wound tubing and interwinding insulation in strip-wound coils and electromagnet coils. 3M Innovative Paper Technologies UL Recognized Insulation Systems (File No. 65007) may be found on UL's Electrical Insulation Systems Database at <a href="http://www.ul.com/eis/">http://www.ul.com/eis/</a>.

		ASTM Test Method	IF 10+1
Nominal	mm	D-645	0.28
Thickness	mil		11
Basis Weight	g/m² lb/yd²	D-202	310 0.57
Density	g/cc		1.1
Tensile	lb/inch	D-828	30
Strength, MD	N/cm		53
Tensile	lb/inch	D-828	20
Strength, CD	N/cm		35
Elmendorf	g	D-689	144
Tear, MD	N		1.4
Elmendorf	g	D-689	224
Tear, CD	N		2.2
Dielectric Breakdown Strength	kV	D-149	5.0
Moisture Absorption	%	D-644	<1

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