



MANUFACTURERS OF  
ELECTRICAL INSULATION MATERIALS

INSULATING COMPONENTS FOR  
POWER SYSTEMS EQUIPMENT

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## MATERIAL DATA SHEET

**Item:** TufQuin 110 & 120

**Description:** TufQuin 110 is a flexible, conformable paper exhibiting physical toughness in the form of high tensile strength and excellent tear resistance. TufQuin 110 offers good dielectric strength characteristics and thermal conductivity in conjunction with high temperature performance.

TufQuin 120 is generically the same as TufQuin 110, but this version employs a slightly different manufacturing process that yields thicker constructions while maintaining conformability.

Both TufQuin 110 and 120 are qualified for use in electrical insulation systems up to Class N (200°C) as per UL 1446 and IEC Standard 60085; CSA Component Acceptance at 200°C.

**Application:**

- Transformers, Coils, Reactors (layer, barrier, and end-turn insulation for dry type and oil filled)
- Spiral and Convolute-wound Tubing
- Motors and Generators (slot, phase, and wedge insulation)
- Wire and Cable Wrap
- Switchgear Insulation
- Capacitor Layer Insulation

**Availability:** Fabricated Parts: The Gund Company custom fabricates insulation materials to the exact specifications and drawings of our customers

### TufQuin 110

Key Characteristics	Units - English (SI)	By Thickness, Mil (mm)				
		2 (0.05)	2.5 (0.06)	3 (0.08)	5 (0.13)	10 (0.25)
Basis Weight	lb./yard <sup>2</sup> (kg/m <sup>2</sup> )	0.10 (0.044)	0.13 (0.07)	0.16 (0.09)	0.26 (0.14)	0.53 (0.29)
Elongation, MD	%	10	12	15	19	18
Tensile Strength, MD	lb./yard <sup>2</sup> (kg/m <sup>2</sup> )	12 (2.1)	15 (2.6)	20 (3.5)	24 (4.2)	50 (8.7)
Dielectric Breakdown Strength	kV	0.4	0.6	0.7	0.8	2.0
Moisture Absorption	%	1.0	1.0	1.0	1.0	1.0
Total Moisture Content	%	1.5	1.5	1.5	1.5	1.5

### TufQuin 120

Key Characteristics	Units - English (SI)	By Thickness, Mil (mm)			
		7.5 (0.19)	12 (0.30)	15 (0.38)	20 (0.21)
Basis Weight	lb./yard <sup>2</sup> (kg/m <sup>2</sup> )	0.35 (0.19)	0.64 (0.35)	0.79 (0.43)	1.1 (0.60)
Elongation, MD	%	14	14	14	15
Tensile Strength, MD	lb./yard <sup>2</sup> (kg/m <sup>2</sup> )	36 (6.3)	55 (9.6)	75 (13)	110 (19)
Dielectric Breakdown Strength	kV	1.0	1.9	2.1	3.3

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