



A FLEXcon Holdings Company

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TECHNICAL DATA SHEET

416NMN37H3 - 416 Nomex® / PET / 416 Nomex® Class H 180°C Insulation

A flexible composite insulation composed of type 416 Nomex® meta-aramid paper and electrical grade PET film laminated with a high temperature structural adhesive system.

PRODUCT ATTRIBUTES

- Excellent thermal stability and electrical properties
- High tear, tensile, and burst strength
- Excellent moisture and chemical resistance
- UL 1446 220°C and recognized insulation system, file E60273

PRODUCT APPLICATIONS

- Flexible circuit materials
- Power distribution
- Heating elements
- Electrical cables

REPRESENTATIVE PHYSICAL PROPERTIES		
PROPERTY	VALUE	TEST METHOD
NOMINAL THICKNESS, inches	0.014	ASTM D374
YIELD		
Square yards per pound	1.30	
Pounds per Square Yards	0.77	
DIELECTRIC STRENGTH (Volts - 2" electrodes)	19,500	ASTM D149
DIELECTRIC CONSTANT (23°C, 50% RH, 60 Hz)	3.1	
TENSILE STRENGTH (psi)		ASTM D828
Machine Direction (MD)	220	
Cross Machine Direction (XMD)	210	
GRAVES TEAR STRENGTH (lbs)		ASTM D1004
Machine Direction (MD)	30	
Cross Machine Direction (XMD)	22	
DISSIPATION FACTOR (23°C, 50% RH, 60 Hz)	0.005	ASTM D150
VOLUME RESISTIVITY (Ohm-cm) (23°C, 50% RH)	10 ¹⁵	ASTM 257-66
SURFACE RESISTIVITY (Ohm) (23°C, 50% RH)	10 ¹⁵	ASTM-257-66

STORAGE

- Shelf life: one (1) year
- Store in a clean area free from exposure to excessive heat, moisture or direct sunlight (50°F to 80°F).

Product performance will vary in each application and is dependent upon composite construction. Alamotape does not guarantee the replication of this data by third parties. None of the data or statements contained herein is intended to warrant the performance of this product. Data is representative and not intended as a manufacturing specification.