



**ARLON**  
INNOVATIONS

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**TECHNICAL DATA SHEET**

# 416NMN

## 416 Nomex<sup>®</sup> / Mylar<sup>®</sup> / 416 Nomex<sup>®</sup>

A series of flexible composite insulations composed of type 416 Nomex<sup>®</sup> meta-aramid paper and electrical grade Mylar<sup>®</sup> polyester 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 180°C recognized insulation system, file E60273

### PRODUCT APPLICATIONS

- Slot and phase insulation for motors and generators
- Layer and ground insulation for Class H dry type transformers

CATALOG NUMBER	NOMINAL THICKNESS (in) ASTM D374	DIELECTRIC STRENGTH (V) ASTM D149	YIELD ASTM D828		TENSILE STRENGTH (psi) ASTM D828		GRAVE TEAR STRENGTH (lb) ASTM D1004	
			yd <sup>2</sup> /lb	lb/yd <sup>2</sup>	MD	XMD	MD	XMD
416MX222	.006	11,000	3.08	0.32	95	70	9	7
416MX252	.009	16,000	1.60	0.63	120	90	10	9
416MX27H2	.012	18,000	1.49	0.67	200	180	25	20
416MX333	.010	13,000	2.06	0.49	152	110	14	11
416MX353	.012	17,000	1.62	0.62	170	130	16	14
416MX37H3	.014	19,500	1.33	0.75	220	210	26	22
416MX3103	.016	21,000	1.03	0.97	250	220	33	27
416MX3143	.020	32,000	0.84	1.19	290	270	37	34
416MX535	.014	16,000	1.47	0.68	220	158	23	16
416MX555	.016	15,000	1.24	0.81	240	185	28	22
416MX5105	.020	22,000	0.89	1.12	300	290	40	32
DIELECTRIC CONSTANT (23°C, 50% RH, 60 Hz) ASTM D150		DISSIPATION FACTOR (20°C, 50% RH, 60 Hz) ASTM D150		VOLUME RESISTIVITY (23°C, 50% RH, Ohm - cm) ASTM 257-66		SURFACE RESISTIVITY (23°C, 50% RH, Ohm) ASTM 257-66		
3.2		0.005		1015		1015		

Product performance will vary in each application and is dependent upon composite construction. Arlon Innovations 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.



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**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).

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