



**TECHNICAL DATA SHEET**

# 464NM416N223EA

## Class H 180°C Insulation

A series of composites of type 464 Nomex® aramid fiber, 416 Nomex® meta-aramid paper and electrical grade polyester film laminated with a high-temperature adhesive system. This product is coated on one side with Arlon Innovations epoxy based thermosetting adhesive system. The thermosetting adhesive is applied to the Nomex® in b-stage form. Once b-staged, the product can be heated and pressed for full cure bonding to many substrates.

### 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
- High Bond Strength Applications

REPRESENTATIVE PHYSICAL PROPERTIES		
PROPERTY	VALUE	TEST METHOD
<b>NOMINAL THICKNESS</b> , inches	0.007	ASTM D374
<b>YIELD</b> Square yards per pound Pounds per Square Yards	2.42 0.41	
<b>DIELECTRIC STRENGTH</b> (Volts – 2" electrodes)	9,000	ASTM D149
<b>TENSILE STRENGTH</b> (psi) Machine Direction (MD) Cross Machine Direction (XMD)	120 80	ASTM D828
<b>BOND STRENGTH (EPOXY)</b>	Exceeds Strength of Nomex	
<b>LAMINATION PARAMETERS</b> Temperature (°F) Time (minutes) Pressure (psi)	350 45 50 - 100	
<b>OPERATING TEMPERATURES</b>	-40° — 220°C	

Lamination parameters are intended as guidelines only. Arlon Innovations strongly recommends that each manufacturer optimize the lamination parameters to each specific application.

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.



**Arlon Innovations** 210.798.1900  
6110 Rittiman Road 800.549.9860  
San Antonio, TX 78218 arloninnovations.com

## TECHNICAL DATA SHEET

### 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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