

Arlon Innovations210.798.19006110 Rittiman Road800.549.9860San Antonio, TX 78218arloninnovations.com

## TECHNICAL DATA SHEET

# **Epoxy Coated Nomex**<sup>®</sup> – 418X14EA1 (Single Sided) **Class R 220°C Insulation** – 418X14EA2 (Double Sided)

A flexible composite insulation composed of 14 mil 418 Nomex<sup>®</sup> aramid paper coated on one or both sides with Arlon Innovations epoxy based thermosetting adhesive system. The thermosetting adhesive is applied to the Nomex<sup>®</sup> 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, electrical properties, and chemical resistance
- High adhesive bond strength
- High continuous temperature resistance
- RoHS and REACH compliant

## **REPRESENTATIVE PHYSICAL PROPERTIES**

PROPERTY	VALUE	TEST METHOD
NOMINAL THICKNESS	0.015 inches	ASTM D374
<b>YIELD</b> Square yards per pound Pounds per square yard	0.9443 1.0589	
<b>DIELECTRIC STRENGTH</b> (2-inch diameter electrodes)	12,880 Volts	ASTM D149
TENSILE STRENGTH Machine Direction (MD) Cross Machine Direction (XMD)	85.07 lb/in 58.24 lb/in	ASTM D828
DIELECTRIC CONSTANT	3.4 (23°C, 50% RH, 60 Hz)	ASTM D150
<b>LAMINATION PARAMETERS</b> Temperature Time Pressure	350°F 45 minutes 50 – 100 psi	
OPERATING TEMPERATURE	-40°C – 220°C	
BOND STRENGTH	Exceeds strength of material	

Lamination Parameters are to be used as guidelines only. Samples should be tested for each application to insure proper usability.

#### STORAGE

- Shelf life: one (1) year from the date of shipment.
- 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. 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.