



TECHNICAL DATA SHEET

Epoxy Coated Nomex® – 418X5EA1 (Single Sided) Class R 220°C Insulation – 418X5EA2 (Double Sided)

A flexible composite insulation composed of 5 mil 418 Nomex® aramid paper coated on one or both sides 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, 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	0.005 - 0.006 inches	ASTM D374
YIELD		
Square yards per pound	4.76	
Pounds per square yard	0.21	
DIELECTRIC STRENGTH (2-inch diameter electrodes)	3650 Volts	ASTM D149
TENSILE STRENGTH:		
Machine Direction (MD)	52 N/cm	ASTM D828
Cross Machine Direction (XMD)	35 N/cm	
DIELECTRIC CONSTANT	3.0 (23°C, 50% RH, 60 Hz)	ASTM D150
180° PEEL ADHESION (STAINLESS STEEL)	Exceeds strength of Nomex	ASTM D3330
LAMINATION PARAMETERS		
Temperature	350°F	
Time	45 minutes	
Pressure	50 – 100 psi	
OPERATING TEMPERATURE	-40°C – 220°C	

Lamination Parameters are to be used as guidelines only. Samples should be tested for each application to insure proper usability. Parameters can be adjusted to match performance requirements, but curing temperature should never fall below 350°F.

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.