



TECHNICAL DATA SHEET

Epoxy Coated Nomex® – 410X10EA1 (Single Sided) Class R 220°C Insulation – 410X10EA2 (Double Sided)

A flexible composite insulation composed of 10 mil 410 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 | 0.011 inches | ASTM D374 |
| YIELD | 1 side | |
| Square yards per pound | 2.17 | |
| Pounds per square yard | 0.46 | |
| DIELECTRIC STRENGTH (2-inch diameter electrodes) | 8800 Volts | ASTM D149 |
| TENSILE STRENGTH | | |
| Machine Direction (MD) | 180 lb/in | ASTM D828 |
| Cross Machine Direction (XMD) | 90 lb/in | |
| 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.