

**TECHNICAL DATA SHEET** 

## 410 Nomex<sup>®</sup> Insulation - 410X2AC1 (Single Sided) **Epoxy Flame Retardant**

A flexible composite insulation composed of 2 mil type 410 Nomex® aramid fiber paper coated on one side with a high temperature 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
- Very thin profile
- RoHS and REACH compliant

| REPRESENTATIVE PHYSICAL PROPERTIES  |                               |             |
|---|-------------------------------|-------------|
| PROPERTY  | VALUE                         | TEST METHOD |
| NOMINAL THICKNESS, inches   | 0.004                         | ASTM D374   |
| BOND STENGTH  | Exceeds strength of substrate |             |
| <b>DIELECTRIC STRENGTH,</b> Volts (2-inch diameter electrodes)                        | 1,290                         | ASTM D149   |
| <b>TENSILE STRENGTH,</b> lb/in  Machine Direction (MD)  Cross Machine Direction (XMD) | 27<br>27                      | ASTM D828   |
| DIELECTRIC CONSTANT<br>(23°C, 50% RH, 60 Hz)  | 3.0                           | ASTM D150   |
| DISSIPATION FACTOR<br>(23°C, 50% RH, 60 Hz)   | 0.01                          | ASTM D150   |
| LAMINATION PARAMETERS Temperature (°F) Time (minutes) Pressure (psi)                  | 310-350<br>30<br>150 – 200    |             |
| <b>OPERATING TEMPERATURE,</b> °C  | -40 to 180                    |             |

This product complies with RoHS (Restriction of Hazardous Substances) Directive, citation 2002/95/EC. Arlon Innovations does not manufacture this material using any of the banned substances listed in the directive guidelines as of July 1, 2008.

## **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.