



**TECHNICAL DATA SHEET**

# 410UNU222

## Class R 220°C Insulation

A series of composites of type 410 Nomex® aramid fiber and Ultem® film laminated with a high temperature polyester adhesive system.

### PRODUCT ATTRIBUTES

- Excellent Thermal Stability
- Excellent Mechanical Properties
- Excellent Thermal Conductivity

| REPRESENTATIVE PHYSICAL PROPERTIES                           |                  |             |
|--|------------------|-------------|
| PROPERTY   | VALUE            | TEST METHOD |
| <b>NOMINAL THICKNESS</b> , inches                            | 0.007            | ASTM D374   |
| <b>YIELD</b>   |                  |             |
| Square Yards per Pound                                       | 3.12             |             |
| Pounds per Square Yard                                       | 0.32             |             |
| <b>DIELECTRIC STRENGTH</b><br>(Volts - 2" electrodes)        | 11,800           | ASTM D149   |
| <b>DIELECTRIC CONSTANT</b><br>(23°C, 50% RH, 60 Hz)          | 3.2              | ASTM D150   |
| <b>TENSILE STRENGTH</b> (psi)                                |                  |             |
| Machine Direction (MD)                                       | 136              | ASTM D828   |
| Cross Machine Direction (XMD)                                | 133              |             |
| <b>GRAVES TEAR STRENGTH</b> (lbs)                            |                  |             |
| Machine Direction (MD)                                       | 13               | ASTM D1004  |
| Cross Machine Direction (XMD)                                | 13               |             |
| <b>DISSIPATION FACTOR</b><br>(23°C, 50% RH, 60 Hz)           | 0.005            | ASTM D150   |
| <b>VOLUME RESISTIVITY</b> (Ohm-cm)<br>(23°C, 50% RH, Ohm-cm) | 10 <sup>15</sup> | ASTM 257-66 |
| <b>SURFACE RESISTIVITY</b> (Ohm)<br>(23°C, 50% RH)           | 10 <sup>13</sup> | ASTM-257-66 |

### 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).

*Product performance will vary in each application and is dependent upon composite construction. Alamotape 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.*