



**TECHNICAL DATA SHEET**

# 410 Nomex® Insulation – 410X31AFR (Single Sided) Acrylic Flame Retardant – 410X131AFR (Double Sided)

A flexible composite insulation composed of 3 mil type 410 Nomex® aramid fiber paper coated on one or both sides with a high temperature acrylic resin system.

### PRODUCT ATTRIBUTES

- Excellent thermal stability and electrical properties
- High tear, tensile and burst strength
- Very thin profile
- RoHS compliant

REPRESENTATIVE PHYSICAL PROPERTIES		
PROPERTY	VALUE	TEST METHOD
<b>NOMINAL THICKNESS</b> , inches	0.005	ASTM D374
<b>YIELD</b>		
Square yards per pound	6.25	
Pounds per square yard	0.16	
<b>DIELECTRIC STRENGTH</b> , Volts (2-inch diameter electrodes)	1,650	ASTM D149
<b>TENSILE STRENGTH</b> , lb/in		
Machine Direction (MD)	39	ASTM D828
Cross Machine Direction (XMD)	20	
<b>GRAVES TEAR STRENGTH</b> , lb/in		
Machine Direction (MD)	4	ASTM D1004
Cross Machine Direction (XMD)	2	
<b>DIELECTRIC CONSTANT</b> (23°C, 50% RH, 60 Hz)	3.0	ASTM D150
<b>DISSIPATION FACTOR</b> (23°C, 50% RH, 60 Hz)	0.01	ASTM D150
<b>NOMINAL VOLUME RESISTIVITY</b> , Ohm-cm (23°C, 50% RH, 60 Hz)	10 <sup>17</sup>	ASTM D257-66
<b>NOMINAL SURFACE RESISTIVITY</b> , Ohm-cm (23°C, 50% RH, 60 Hz)	10 <sup>14</sup>	ASTM D257-66
<b>LAMINATION PARAMETERS</b>		
<b>Temperature</b> (°F)	310-350	
<b>Time</b> (minutes)	30	
<b>Pressure</b> (psi)	100 – 150	
<b>OPERATING TEMPERATURE</b> , °C	-40 to 180	

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.



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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).

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