



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



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This product complies with RoHS (Restriction of Hazardous Substances) Directive, citation 2002/95/EC. Alamotape® 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 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. 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.