



TECHNICAL DATA SHEET

410 Nomex[®] Insulation – 410X5AC1 (Single Sided) Epoxy Flame Retardant

A flexible composite insulation composed of 5 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	0.007	ASTM D374
BOND STRENGTH	Exceeds strength of substrate	
DIELECTRIC STRENGTH , Volts (2-inch diameter electrodes)	3560	ASTM D149
TENSILE STRENGTH , lb/in Machine Direction (MD) Cross Machine Direction (XMD)	83 39	ASTM D828
GRAVES TEAR STRENGTH , lb/in Machine Direction (MD) Cross Machine Direction (XMD)	33 17	ASTM D1004
DIELECTRIC CONSTANT (23°C, 50% RH, 60 Hz)	2.4	ASTM D150
DISSIPATION FACTOR (23°C, 50% RH, 60 Hz)	6	ASTM D150
LAMINATION PARAMETERS Temperature (°F) Time (minutes) Pressure (psi)	310-350 30 150 – 200	
OPERATING TEMPERATURE , °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.