



TECHNICAL DATA SHEET

Melinex™ Insulation – MEL051HEFR (Single Sided) Epoxy Flame Retardant – MEL1H51HEFR (Double Sided)

A flexible composite insulation composed of 5 mil type 339 DuPont Melinex™ with an epoxy thermosetting adhesive on one or both sides. The epoxy adhesive is b-staged and can bond with heat and pressure to many substrates. Melinex™ is a translucent white glossy film with similar properties to DuPont Mylar™.

PRODUCT ATTRIBUTES

- Excellent thermal stability, electrical properties, and chemical resistance
- High continuous temperature resistance
- Very thin profile
- RoHS compliant

REPRESENTATIVE PHYSICAL PROPERTIES		
PROPERTY	VALUE	TEST METHOD
NOMINAL THICKNESS , inches	0.0065 – 0.008	ASTM D374
ADHESIVE THICKNESS , inches	0.0015 ± 0.0002	
DIELECTRIC STRENGTH , Volts (2-inch diameter electrodes)	13,500	ASTM D149
TENSILE STRENGTH Machine Direction (MD) Cross Machine Direction (XMD)	86 lbf 110 lbf	ASTM D882A
PEEL ADHESION (copper) , lbf: 90° Peel (German Wheel)	7.0	
DIELECTRIC CONSTANT , (23°C, 50% RH, 100 Hz)	2.6	ASTM D150-81
LAMINATION PARAMETERS Temperature , °F Time , minutes Pressure , psi	310-350 30 150 – 200	
CONTINUOUS USE TEMPERATURE , °C	105	

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.