



TECHNICAL DATA SHEET

Melinex™ Insulation Epoxy Flame Retardant – MELMEL1551EFR (Double Sided)

A flexible composite insulation composed of a 5 mil type 339 DuPont Melinex™ laminated with another 5 mil type 339 DuPont Melinex, coated with an epoxy thermosetting adhesive on both sides. The epoxy adhesive is b-staged and can bond with heat and pressure to many substrates. Melinex™ is an opaque 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	0.012 – 0.013	ASTM D374
DIELECTRIC STRENGTH , Volts (2-inch diameter electrodes)	18,500	ASTM D149
TENSILE STRENGTH Machine Direction (MD) Cross Machine Direction (XMD)	160 lbf 190 lbf	ASTM D882A
PEEL ADHESION (copper) , lbf: 90° Peel (German Wheel)	Substrate Failure (adhesive strength exceeds the film strength)	
DIELECTRIC CONSTANT , (23°C, 50% RH, 60 Hz)	3.3	ASTM D150
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.