

TECHNICAL DATA SHEET

Melinex[™] Insulation – MEL052ATO (Single Sided) Acrylic Flame Retardant

A flexible composite insulation composed of 5 mil type 339 DuPont Melinex[™] with an acrylic thermosetting adhesive on one or both sides. The acrylic 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

- UL VTM-0 compliant
- Excellent electrical properties and chemical resistance
- High adhesive bond strength
- RoHS and REACH compliant

REPRESENTATIVE PHYSICAL PROPERTIES

PROPERTY	VALUE	TEST METHOD
NOMINAL THICKNESS	0.007 inches	ASTM D374
YIELD Square yards per pound Pounds per square yard	2.7 0.37	
DIELECTRIC STRENGTH (2" electrodes), Volts: DIELECTRIC CONSTANT (23°C, 50% RH, 100 Hz):	13,500 2.6	ASTM D149 ASTM D150-81
Tensile Strength, Ibf: Machine Direction (MD) Cross Machine Direction (XMD)	86 110	ASTM D882A
PEEL ADHESION (STAINLESS STEEL), LBF: 180° Peel	Exceeds strength of substrate	ASTM D3330
LAMINATION PARAMETERS: Temperature Time Pressure	310°F – 350°F 30 minutes 25 – 75 psi	
CONTINUOUS USE TEMPERATURE (PET) UPPER MELT TEMPERATURE (PET) MINIMUM SERVICE TEMPERATURE (ADHESIVE)	105°C 255 – 260°C -40°C	

Lamination Parameters are to be used as guidelines only. Samples should be tested for each application to ensure proper usability. Parameters can be adjusted to match performance requirements, but curing temperature should never fall below 310°F.

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.