

3M[™] Polyester Film Electrical Tape 1350F-1, 1350F-2 with Acrylic Adhesive

Data Sheet November 2024

Product Description

3M™ Polyester Film Electrical Tape 1350F is a yellow, white, black, or blue, UL recognized flame retardant, nominal 2.5-mil (0.064 mm) or 3.5-mil (0.089 mm) thick tape composed of a 1-mil (0.025 mm) or 2-mil (0.051 mm) polyester film backing coated on one side with a non-corrosive, acrylic pressure-sensitive adhesive.

- Commonly used in wrapping coils, capacitors, wire harnesses, transformers, shaded pole motors and fractional-horsepower motors
- Adhesive requires no heat, moisture or other manner of preparation to affect application
- Rated for continuous operation not exceeding 130°C (266°F) per UL and CSA listings

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Properties 1350F-1*

Physical Properties	Value	Electrical Properties	Value
Color - Visual	Yellow, White, Black	Comparative Tracking Index (CTI) ⁴	II
Adhesive	Acrylic	Dielectric Breakdown ¹	≥5000 V
Backing	Polyester Film	Electrolytic Corrosion Factor ³	1.0
Flame Retardant ²	Pass	Insulation Resistance ¹ (High Humidity Method)	≥1x10 ¹² Ω
Mechanical Properties	Value Imperial (Metric)		
Backing Thickness - Nominal	1 mil (0.025 mm)		
Total Thickness ¹	2.5 +/- 0.5 mils (0.064 mm +/- 0.013)	The technical information and data in this table should be considered representative or typical only and should not be used for specification purposes.	
Adhesion to Steel ¹	≥25 oz/in (2.7 N/cm)		
Breaking Strength ¹	≥20 lb/in (35 N/cm)		
Elongation ¹	≥50%		

^{*}Self-certified to Commercial Item Description: A-A-59770A (2007) Type V (MF 2.5)

Properties 1350F-2

Physical Properties	Value	Electrical Properties	Value
Color - Visual	Yellow, White, Black, Blue ⁵	Comparative Tracking Index (CTI) ⁴	Illa
Adhesive	Acrylic	Dielectric Breakdown ¹	≥7000 V
Backing	Polyester Film	Electrolytic Corrosion Factor ³	1.0
Flame Retardant ²	Pass	Insulation Resistance ¹ (High Humidity Method)	≥1x10 ¹² Ω
Mechanical Properties	Value Imperial (Metric)		
Backing Thickness - Nominal	2 mil (0.051mm)		
Total Thickness ¹	3.5 +/- 0.5 mils (0.089 +/- 0.013 mm)	The technical information and data in this table should be considered representative or typical only and should not be	
Adhesion to Steel ¹	≥25 oz/in (2.7 N/cm)	used for specification purposes.	
Breaking Strength ¹	≥40 lb/in (70 N/cm)		
Elongation ¹	≥50%		

Notes:

- 1. ASTM D1000 Test Method properties measured at room temperature 73°F (23°C) unless otherwise stated
- 2. UL Recognized Flame Retardant per UL510A Standard
- 3. 3M Test Method ETM-54001 1.0 equates to no corrosion observed
- 4. UL Recognized to meet UL840 Material Group when tested to IEC 60112 on both sides of the tape
- 5. Blue Color (1350F-2) may not be available globally, please consult with your local 3M contact

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Agency Approvals & Self Certifications	 UL Component Recognized: UL510A Standard, Category OANZ2, File No. E17385 CSA Certified: Standard C22.2 No. 66, File No. 093411, Class 9052-30 Self-certified to Commercial Item Description: A-A-59770A (2007) Type V (MF 2.5)*
	For Regulatory information including RoHS, REACH, please visit <u>www.3M.com/regs</u>
Shelf Life & Storage	This product has a 5-year shelf life (from date of manufacture) when stored in humidity-controlled storage (50°F/10°C to 80°F/27°C and <75% relative humidity).
Availability	3M [™] Polyester Film Electrical Tape 1350F-1, 1350F-2 available from 3M authorized distributors/converters
	Also available from www.3M.com/oem or call 1.800.676.8381

TECHNICAL STATEMENT

Intended Use (Automotive): These products are intended for use within a high voltage lithium-ion battery pack to help prevent the unintended contact of electrically charged surfaces of cells and pack components operated at standard temperature conditions in automotive, off-highway, industrial, and marine battery applications. Since there are many factors that can affect a product's use, the customer remains responsible for determining whether the 3M product is suitable and appropriate for the customer's specific application and system, including customer conducting an appropriate risk assessment and evaluating the 3M product in customer's application and system.

Restricted Use: 3M advises against the use of this 3M product in any application other than the stated intended use(s), since other applications have not been evaluated by 3M and may result in an unsafe or unintended condition

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