



3M™ Polyester Film Electrical Tape 1351-1 & 1351-1 (1.5) with Acrylic Adhesive

Data Sheet

June 2025

Product Description

3M™ Polyester Film Electrical Tape 1351-1 and 1351-1 (1.5) is a yellow, UL recognized flame retardant, nominal 2.5-mil (0.064 mm) or 2.8-mil (0.071 mm) thick tape composed of a 1-mil (0.025 mm) or 1.5-mil (0.038 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
- 1351-1: Rated for continuous operation not exceeding 130°C (266°F) per UL and CSA listings

Automotive Manufacturing, Design, and Quality Disclaimer. This product does not fully adhere to all typical automotive design or quality system requirements, such as IATF 16949 or VDA 6.3. This product may not be manufactured in an IATF certified facility. Values are not to be used for specification purposes. Cpk calculations for properties may be made once specification is established for specific application. Customer is solely responsible for evaluating the product and determining whether it is appropriate and suitable for customer's automotive application and for conducting incoming inspections before use of the product. Failure to do so may result in injury, death, and/or harm to property.

Properties 1351-1*

Physical Properties	Value	Electrical Properties	Value
Color - Visual	Yellow	Comparative Tracking Index (CTI) ⁴	I
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)	The technical information and data in this table should be considered representative or typical only and should not be used for specification purposes.	
Backing Thickness - Nominal	1 mil (0.025 mm)		
Total Thickness ¹	2.5 +/- 0.5 mils (0.064 mm +/- 0.013)		
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 1351-1 (1.5)

Physical Properties	Value	Electrical Properties	Value
Color - Visual	Yellow	Comparative Tracking Index (CTI) ⁴	I
Adhesive	Acrylic	Dielectric Breakdown ¹	≥5500 V
Backing	Polyester Film	Insulation Resistance ¹ (High Humidity Method)	≥1x10 ¹² Ω
Flame Retardant ²	Pass	The technical information and data in this table should be considered representative or typical only and should not be used for specification purposes.	
Mechanical Properties	Value Imperial (Metric)		
Backing Thickness - Nominal	1.5 mil (0.038 mm)		
Total Thickness ¹	2.8 +/- 0.4 mils (0.071 +/- 0.0115 mm)		
Adhesion to Steel ¹	≥21 oz/in (2.3 N/cm)		
Breaking Strength ¹	≥20 lb/in (35 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

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Agency Approvals & Self Certifications	• 1351-1: UL Component Recognized: UL510A Standard, Category OANZ2, File No. E17385 • 1351-1: CSA Certified: Standard C22.2 No. 66, File No. 093411, Class 9052-30 • 1351-1: Self-certified to Commercial Item Description: A-A-59770A (2007) Type V (MF 2.5) • 1351-1 (1.5) UL Component Recognized: UL510A Standard, Category OANZ2, File No. E256906 • For Regulatory information including RoHS, REACH, please visit www.3M.com/regs
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 1351-1, 1351-1 (1.5) 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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