



# 3M™ Epoxy Film Electrical Tape 1 with Thermosetting Acrylic Adhesive

## Data Sheet April 2021

**Product Description** 3M™ Epoxy Film Electrical Tape 1 is a white UL recognized flame retardant, 3.7-mil (0.094 mm) thick tape composed of a polyester film reinforced with a thermoset, flame-retardant epoxy resin coated on one side and coated on the epoxy layer with a non-corrosive, thermosetting acrylic pressure-sensitive adhesive.

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

### Properties

Physical Properties	Value Imperial (Metric)	Electrical Properties	Value Imperial (Metric)
Color - Visual	White	Comparative Tracking Index (CTI) <sup>4</sup>	I
Adhesive	Thermosetting Acrylic	Dielectric Breakdown <sup>1</sup> - Minimum	6000 V
Backing	Polyester Film / Epoxy Resin	Electrolytic Corrosion Factor <sup>3</sup>	1.0
Flame Retardant <sup>2</sup>	Pass	Insulation Resistance <sup>1</sup> - Minimum	1x10 <sup>12</sup> Ω
Mechanical Properties	Value Imperial (Metric)		
Backing Thickness - Nominal	2.4 mil (0.061 mm)		
Total Thickness <sup>1</sup>	3.7 +/- 0.4 mils (0.094 +/- 0.01 mm)		
Adhesion to Steel <sup>1</sup> - Minimum	25 oz/in (2.7 N/cm)		
Breaking Strength <sup>1</sup> - Minimum	25 lb/in (44 N/cm)		
Elongation <sup>1</sup> - Minimum	100%		

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

### 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
- For Regulatory information including RoHS, REACH, please visit [www.3M.com/regs](http://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™ Epoxy Film Electrical Tape 1 available from 3M authorized distributors/converters

Also available from [3M.com/oem](http://3M.com/oem) or call 1.800.245.3573.

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# **3M**

**Electrical Markets Division**

13011 McCallen Pass, Bldg. C

Austin, TX 78753

Phone: 800.676.8381

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