

3M™ Epoxy Film Electrical Tape 1 with Acrylic Adhesive

Data Sheet

September 2008

Description 3M™ Epoxy Film Electrical Tape 1 is a 3.5 mil high dielectric flame-retardant tape. This tape has an acrylic adhesive that is resistant to heat, oxidation, solvents and oils. It is UL 510 flame-retardant, temperature rated to 266° F (130° C), and is printable.

Agency Approvals, Self Certifications, MIL Specs

- UL Recognized for flame retardancy per UL 510, Product Category OANZ2, File E17385

RoHS Compliant 2002/95/EC" means that the product or part ("Product") does not contain any of the substances in excess of the maximum concentration values in EU Directive 2002/95/EC, as amended by Commission Decision 2002/618/EC, unless the substance is in an application that is exempt under RoHS. This information represents 3M's knowledge and belief, which may be based in whole or in part on information provided by third party suppliers to 3M.

Applications 3M Tape 1 is especially suited for applications such as wrapping capacitors, relays, coils, transformers, bobbin-wound shaded-pole motors, and wire harnesses.

Typical Properties

Data is not for specifications. Values are typical and should not be considered minimum or maximum. Properties measured at room temperature 73° F (~23° C) unless otherwise stated.

Physical

Property (Test Method) (ASTM D1000 unless noted)	Typical Value US units (metric)
Color	white
Adhesive	acrylic
Backing Thickness	2.2 mils (0,055 mm)
Total Thickness	3.5 mils (0,088 mm)
Elongation (% at break)	120%
Operating Temperature	130° C
Adhesion to Steel	40 oz/in (4,4 N/10 mm)
Flammability (UL 510)	Yes
Printable	Yes



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Typical Properties

Electrical

Property (Test Method) (ASTM D1000 unless noted)	Typical Value US units (metric)
Dielectric Breakdown	6500 V
Breaking Strength	30 lbs/in (53 N/10 mm)
Insulation Resistance (megohms)	>1 x 10 ⁶
Electrolytic corrosion Factor 3M Test Method	1.0
CIT Material Group	1

Specifications

3M™ Epoxy Film Electrical Tape 1 is a 3.5 mil high dielectric flame retardant tape. This tape has an acrylic adhesive that is resistant to heat, oxidation, solvents and oils. It is UL 510 flame-retardant, temperature rated to 266° F (130° C), and is printable.

The adhesive coating shall be smooth and uniform, and be free of lumps and bare spots. There shall be no separator between adjacent layers of the roll. The tape shall perform at a temperature of 266° F (130° C) without loss of physical or electrical properties.

Shelf Life & Storage

The tape has a 5-year shelf life from date of manufacture when stored in a clean, dry place at a temperature of 70° F (21° C) and 40-50% relative humidity.

Availability

3M Tape 1 is available in standard and custom widths and lengths. Standard length is 72 yards.

For availability, please contact your local distributor. Names and addresses are available from 3M.com/electrical [Where to Buy] or call 1-800-676-8381.

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