

3M Data Sheet

Scotch™ 35

Vinyl Electrical Color Coding Tape

1. Product Description

Scotch™ 35 Vinyl electrical Color Coding Tape is an electrical grade polyvinyl chloride tape with a pressure sensitive rubber adhesive available in nine fade resistant colors. Scotch™ 35 Tape is designed for use in phase identification, color coding of motor leads and piping systems, and for marking safety areas. This abrasion and weather resistant tape has excellent electrical insulating properties, wraps smoothly, conforms well and holds over a wide range of temperatures. Scotch™ 35 tape is resistant to moisture, alkalies, acids and corrosion. It is an Underwriters' Laboratories Listed and Canadian Standards Association Certified "Insulating Tape".

- UL listed; UL 510 Standard "Insulating Tape" (product category OANZ), File E129200
- CSA certification; Standard. C22.2 No.197-M1983 "PVC Insulating Tape", File LR 48769
- Polyvinyl chloride (PVC) backing
- Pressure-sensitive rubber based adhesive
- Color Coding for job identification and safety
- Nine fade-resistant colors
- Inhibits corrosion of electrical conductors
- For indoor and outdoor uses

2. Typical Properties*

Temperature Rating ¹	90°C
CSA ²	
Handling	0°C
Continuous Operation	105°C
Color	Red, Yellow, Blue, Brown, Gray, White, Green, Orange, Violet
Thickness ³	0.18 mm
Backing Strength ³	29.77 N/10 mm
Ultimate Elongation ³	225%
Adhesion to Steel ³	2.19 N/10mm
Adhesion to Backing ³	2.19 N/10mm
UL 510 Flame Retardant ⁴	Yes
UL 510 Weather Resistant ⁴	Yes

Electric Strength Remaining ⁵	90%
Flagging ³	<2.54 mm
Telescoping 24 h at 50°C	<2.54 mm
Electric Strength ⁶	45 kV/mm
Insulation Resistance ⁷	10 ¹² Ωcm

*These are typical values and should not be used for specification purposes.

¹ IEC60085

² C22.2 No. 197-M1983

³ IEC 60454-2

⁴ UL-recognized for flame retardancy per UL 510, Product Category OANZ2, File E129200

⁵ ASTM D-1000

⁶ IEC 60243

⁷ IEC 60426

3. Specifications

Product

The tape is based on polyvinyl chloride (PVC) and/or its copolymers and has a rubber based, pressure-sensitive adhesive. The tape shall be 0.18 mm thick, and be UL Listed and marked per UL Standard 510 as "Flame Retardant and Weather Resistant". The tape shall be compatible with synthetic cable insulations, jackets and splicing compounds. The tape will remain stable and will not telescope more than 2.54 mm when maintained at temperatures below 50°C.

4. Installation Techniques

The tape shall be applied in half-lapped layers with sufficient tension to conform and produce a uniform covering. In most applications, this tension will reduce the width of the tape to approximately 5/8 of its original width. On pigtail splice, the tape should be wrapped beyond the end of the wire and then folded back, leaving a protective cushion to resist cut-through. Wrap tape up-hill, taping from a smaller diameter surface to a larger diameter surface. Apply the tape with no tension on the last wrap to prevent flagging.

5. Shelf Life

Scotch™ 35 Vinyl electrical Color Coding Tape complies with the requirements of UL 510 for storage. It has a 5 years shelf life (from the date of manufacture) when stored under the following conditions. Store behind present stock in a clean dry place at a temperature of 21°C and 40-50% relative humidity. Good stock rotation is also recommended.

6. Availability

Scotch™ 35 Vinyl electrical Color Coding Tape is available from your local 3M authorized distributor in the following standard roll sizes:

19 mm x 20 m

12.7 mm x 6 m

Other lengths and widths are available by special request.

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