

Scotch® Vinyl Electrical Tape 66R

Data Sheet

December 2011

Description

Scotch® Vinyl Electrical Tape 66R is a conformable 10 mil (0,254 mm) thick vinyl tape. It is designed to perform in a continuous temperature environment up to 220°F (105°C). It has excellent resistance to abrasion, moisture, alkalis, acid and varying weather conditions. Scotch® Vinyl Electrical Tape 66R, with its combination of elastic Polyvinyl Chloride (PVC) backing and pressure sensitive, rubber based adhesive, provides moisture tight electrical and mechanical protection. Memory action of tape allows it to hold tight and provide pressure to underlying substrate without slipping or flagging. It is compatible with solid dielectric cable insulation. 66R tape is an Underwriters Laboratories recognized “Insulating Tape.”

Agency Approvals & Self Certifications

- UL Recognized 510 Standard “Insulating Tape” (product category OANZ2), File E17385
- Meets UL flame retardant requirements and 220°F (105°C) temperature rating

RoHS compliant 2002/95/EC 

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

- Primary electrical insulation for 600-volt bus bar applications
- Protective jacketing for low and high voltage bus bar
- Primary electrical insulation for cable and wire splices rated up to 600 volts
- Protective jacketing for high voltage cable splices and repairs
- Usable for both indoor and outdoor applications

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Typical Properties

Not for specifications. Values are typical, not to be considered minimum or maximum. Properties measured at room temperature 73°F (23°C) unless otherwise stated.

Physical Properties (Test Method)	Typical Value US units (metric)
Temperature Rating – UL510	220°F (105°C)
Color	Black
Thickness (ASTM D-1000)	10 mils (0,254 mm)
Breaking Strength (ASTM D-1000)	25 lbs./in. (44 N/cm)
Ultimate Elongation (ASTM D-1000)	250%
Adhesion to Steel (ASTM D-1000)	20 oz./in. (2,2 N/cm)
Adhesion to Backing (ASTM D-1000)	20 oz./in. (2,2 N/cm)
Flammability (ASTM D-1000) UL 510	Pass

Electrical Properties (Test Method)	Typical Value US units (metric)
Dielectric Strength (ASTM D-1000) Standard Condition After Humidity Condition	>10,000 Volts >90% of Standard
Insulation Resistance (ASTM D-1000)	>10 ⁶ Megohms

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

Installation Techniques

The tape shall be applied in half-lapped layers with sufficient tension to produce a uniform wind (for most applications this tension will reduce the tape's width to approximately 5/8 of its original width). On pigtail splices, the tape shall be wrapped beyond the end of the wires 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.

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Shelf Life & Storage

Scotch® Electrical Tape 66R has a 5-year shelf life (from date of manufacture) when stored under the following recommended storage conditions. Store behind present stock in a clean dry place at a temperature of 50°F to 80°F (10°C to 21°C) and less than 70% relative humidity . Good stock rotation is recommended.

Availability

Please contact your local distributor; available from 3M.com/electrical [Where to Buy] or call 1.800.245.3573.

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NOTE: The core material being removed from the Termination is mixed polymers and can be recycled with other waste.

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