

Scotch® Varnished Cambric Tapes 2510 and 2520

Data Sheet

June 2016

Product Description

Scotch® Varnished Cambric Tapes are made from straight-cut woven cotton cambric fabric. The fabric is oil primed and coated with a high-grade yellow electrical insulating varnish. Varnished cambric tapes are flexible, electrically insulating and moisture resistant with a smooth finish. Scotch® Varnished Cambric Tape 2510 is yellow, non-adhesive coated and 7 mils thick. Scotch® Varnished Cambric Tape 2520 is yellow with a pressure-sensitive adhesive and 8 mils thick.

They are designed to perform continuously in temperatures up to 105°C (220°F) with excellent resistance to abrasion, puncture and cut-through. The adhesive on Scotch® Varnished Cambric Tape 2520 holds the tape in position after application.

- Excellent dielectric strength.
- Electrical properties are stable up to 105°C.
- High puncture and cut-through resistance.
- Varnished cambric tapes are rated for Class A (105°C).
- Non-corrosive adhesive on Scotch® Varnished Cambric Tape 2520. Adhesive holds film in position until the jacket is applied.

Applications

For insulating joints requiring rapid and clean re-entry such as motor lead and service drop connections, heavy split-bolts in raceways and bus bar insulating. Use in areas where mechanical protection and puncture resistance is critical.

Note: Scotch Varnished Cambric Tapes 2510 and 2520 should not be used as primary insulation for splicing and terminating PILC Cable

Contact your 3M Electrical Markets Division Representative for product recommendation for splicing and terminating PILC Cable

Specifications

Scotch Varnished Cambric Tapes shall be based on straight-cut woven cotton cambric fabric. It shall be coated to a specified thickness, with high grade yellow electrical insulating varnish producing a visibly smooth surface.

The surface shall be free from peeling, blisters, contamination and other imperfections. Finished product thickness shall be controlled to plus or minus 1 mil. Tapes must unwind freely (except adhesive-backed) with no binding between tape layers.

Yellow, dry-finish varnished cambric tape shall be wax-dipped to preserve electrical properties.

Installation Techniques

Apply Scotch Varnished Cambric Tape 2510 and 2520 in half-lapped layers with sufficient tension to conform to the connection surface. Apply a minimum of two half-lapped layers for mechanical protection.

Jacket all varnished cambric applications with Scotch Rubber and Vinyl Splicing Tapes to provide a contamination and moisture seal.

Scotch® Varnished Cambric Tapes 2510 and 2520

Typical Physical and Electrical 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) | 2510 | 2520 |
|-----------------------------------|-------------|-------------------|
| Color | Yellow | Yellow |
| Surface Finish | Dry | Dry with Adhesive |
| Thickness (ASTM D 374) | 7 mils | 8 mils |
| Tensile Strength (ASTM D 295) | 50 ils./in. | 50 ils./in. |
| Adhesion to Steel (ASTM D 1000) | - | 13 oz./in. |
| Adhesion to Backing (ASTM D 1000) | - | 8 oz./in. |
| Thermal Stability | Class A | Class A |
| Solvent Resistance | Excellent | Excellent |
| Oil Resistance | Excellent | Excellent |

| Electrical Properties (Test Method) | 2510 | 2510 |
|-------------------------------------|-----------|-----------|
| Dielectric strength (ASTM D 295) | 800 V/mil | 800 V/mil |

Shelf Life & Storage

Scotch® Varnished Cambric Tapes 2510 and 2520 have 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 70°F and 40% to 50% relative humidity. Proper stock rotation is recommended.

Availability

Scotch® Varnished Cambric Tapes 2510 and 2520 are available from your local 3M authorized distributor. Available from 3M.com/electrical [Where to Buy] or call 1.800.245.3573.

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Electrical Markets Division
6801 River Place Blvd.
Austin, TX 78726-9000
800.245.3573
FAX: 800.245.0329
www.3M.com/electrical

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