Scotch® 27
Glass Cloth Electrical Tape

Data Sheet

1. Product Description

Scotch 27 Glass Cloth Electrical Tape is a woven glass cloth tape designed to operate in 600-volt dry applications requiring high mechanical strength and resistance to high temperatures. The adhesive is a pressure-sensitive rubber thermosetting system. The glass cloth is specially treated and prepared to provide corrosion-free protection. The glass cloth will not shrink, rot, or burn and has a high tensile strength.

- Contains pressure-sensitive thermosetting adhesive which performs at Class B temperature (266°F/130°C)
- Provides heat stable insulation for hot spot applications
- UL Recognized Component listing for 150°C (Guide OANZ2, File E17385)
- CSA Accepted Component 130°C, File LR93411
- Excellent tensile and dielectric strength

2. Applications

- Insulating electric and induction type furnace power supply leads
- Securing systems requiring high mechanical strength and resistance to high temperatures
- Splicing wire that is rated 130°C
- Insulating motor lead connections, switches and controls for furnaces and ovens
- Reinforcing insulation in electrical installations where heavy loads cause high heat and breakdown of original insulation (e.g., motor leads and switches)

3. Typical Data/Physical Properties

Test Method	Typical Value*
Physical Properties	
Color	White
Total Thickness ASTM-D-1000	7.0 mil (0,177 mm)
Tensile Strength ASTM-D-1000	150 lb/in (26 kg/cm)
Ultimate Elongation ASTM-D-1000	5%
Adhesion to Steel ASTM-D-1000	40 oz/in (0,44 kg/cm)
Electrical Properties	
Dielectric Strength ASTM-D-1000	3000 volts
Electrolytic Corrosion Factor 3M Test Method	0.9

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

4. Specifications

Scotch™ 27 tape is a glass cloth electrical tape with a rubber thermosetting adhesive. The tape shall be white and 7 mils (0,177 mm) thick. The tape shall be coated on one side with pressure-sensitive adhesive which shall not require heat, moisture, or other preparation prior to or subsequent to application. 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 be UL Recognized under UL Standard 510. The tape shall perform at a temperature of 130°C without loss of physical or electrical properties.

Engineering/Architecture

All splices for 600-volt wire rated at 266°F (130°C) shall be insulated with a minimum of two half-lapped layers of Scotch 27 Glass Cloth Electrical Tape.

5. Shelf Life

Scotch 27 Glass Cloth Electrical Tape has a 3-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 40-50% relative humidity. Good stock rotation is recommended.

6. Availability

Scotch 27 glass cloth electrical tape is available from your local authorized 3M electrical distributor in the following sizes:

1/2 in x 66 ft. (12,7 mm x 10 m)
3/4 in x 66 ft. (19 mm x 10 m)

Other lengths and widths are available by special request.

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