



27 Electrical Tape - OEM

Glass Cloth With Rubber Thermosetting Pressure Sensitive Adhesive

Data Sheet

1. Product Description

3M™ 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 (130°F/266°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)

Properties	Typical Values*
Color	White
Total Thickness ¹	7.0 mil (0,177 mm)
Tensile Strength ¹	150 lb./in (262 N/10 mm)
Ultimate Elongation ¹	5%
Adhesion to Steel ¹	30 oz/in (3.3 N/10 mm)
Insulation Resistance ¹	4.5 x 10 ⁴ megohms

Electrical Properties

Typical Values*

Dielectric Strength ¹	3000 volts
Electrolytic Corrosion Factor ²	0.9

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

Test Methods:
¹ASTM-D-1000
²3M Test Method

3. Specifications

3M 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.

4. 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 27 Glass Cloth Electrical Tape.

5. Shelf Life

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 30°F and 50% relative humidity. Good stock rotation is recommended.

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IMPORTANT NOTICE

Before using this product, you must evaluate it and determine if it is suitable for your intended application. You assume all risks and liability associated with such use.

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