# 3M<sup>TM</sup> Glass Cloth Electrical Tape 69 with Silicone Pressure-Sensitive Adhesive

Data Sheet May 2014

#### **Description**

3M<sup>TM</sup> Glass Cloth Electrical Tape 69 is a white glass cloth tape with a high-temperature thermosetting silicone pressure-sensitive adhesive. It is designed for use in 600-volt dry location applications motors, and transformers with and without varnish coating. Key attributes like high mechanical strength and resistance to high temperatures provide excellent performance. The thermosetting adhesive provides an increased bond once applied in areas of high ambient temperatures. The thermosetting adhesive provides elevated temperature performance up to Class N 392°F (200° C) temperature rating.

This tape provides insulation and solvent-resistant protection for use as coil cover, anchor, banding and core, layer and crossover insulation. This tape features a non-corrosive adhesive. It is conformable, printable and flame retardant.

#### Agency Approvals, Self Certifications, MIL Specs

#### Meets Requirements of:

- Military Specification No. Mil-I-19166C
- UL Recognized Component listing for 200° C (Guide OANZ2, File E17385)
- CSA Accepted Component 180° C, File LR93411

#### RoHS 2011/65/EU

"RoHS 2011/65/EU" means that the product or part does not contain any of the substances in excess of the maximum concentration values ("MCVs") in EU RoHS Directive 2011/65/EU. The MCVs are by weight in homogeneous materials. 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**

- Insulating electric and induction-type furnace power supply leads
- Securing high-temperature, non-PSA insulation (such as asbestos and glass) in high-temperature areas
- Securing Scotch<sup>®</sup> Fire Retardant Electric Arc Proofing Tape 77
- Splicing wire SF and SFF rated 302° F (150° C), 356° F (180° C)
- Reinsulating and repairing coils on mining machines
- Splicing silicone-covered glass wire where splices require more abrasion resistance and mechanical strength than can be provided by silicone tapes Insulating Class "H" dry-type transformer leads
- Insulating splices made on SA type wire in heat treat areas
- Especially suited to high-temperature applications
- Used in a variety of coil/transformer and motor applications, including an outer wrap for bobbin wound coils, banding arbor wound coils, lead pad hold down, end turn and lead anchor and connection.

#### **Typical Properties**

Data is not for specifications. Values are typical and should not be considered minimum or maximum. Properties measured at room temperature 73° F (~23° C) unless otherwise stated.

#### **Physical**

Property (Test Method) (ASTM D1000 unless noted)	Typical Value US units (metric)
Color	white
Adhesive	silicone
Backing Thickness	5.0 mils (0,125 mm)
Total Thickness	7.0 mils (0,177 mm)
Elongation (% at break)	5%
Operating Temperature	200° C
Adhesion to Steel	40 oz/in (4.4 N/10 mm)
UL 510 Flame Retardant	Yes

#### **Electrical**

Property (Test Method) (ASTM D1000 unless noted)	Typical Value US units (metric)
Dielectric Breakdown	3000 V
Breaking Strength	180 lbs/in (314 N/10 mm)`
Insulation Resistance	4.8 x 10 <sup>4</sup> megohms
CTI Material Group	1
Electrolytic Corrosion Factor	
3M Test Method	0.9

#### **Specifications**

3M<sup>TM</sup> Glass Cloth Electrical Tape 69 is a glass cloth electrical tape with a silicone 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 392° F (200° 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<sup>®</sup> Glass Cloth Electrical Tape 69.

## Shelf Life & Storage

This product has a 5-year shelf life from date of manufacture when stored in a humidity controlled storage (50°F/10°C to 80°F/27°C and <75% relative humidity).

#### **Availability**

3M<sup>™</sup> Glass Cloth Electrical Tape 69 is available in standard and custom lengths and widths. Standard length is 36 yards.

For availability, please contact your local distributor. Names and addresses are available from 3M.com/electrical [Where to Buy], or call 1-800-676-8381 or 1-800-245-3573.

#### **Important Notice**

All statements, technical information, and recommendations related to 3M's products are based on information believed to be reliable, but the accuracy or completeness is not guaranteed. 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. Any statements related to the product which are not contained in 3M's current publications, or any contrary statements contained on your purchase order shall have no force or effect unless expressly agreed upon, in writing, by an authorized officer of 3M.

#### Warranty; Limited Remedy; Limited Liability

This product will be free from defects in material and manufacture at the time of purchase. 3M MAKES NO OTHER WARRANTIES INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. If this product is defective within the warranty period stated above, your exclusive remedy shall be, at 3M's option, to replace or repair the 3M product or refund the purchase price of the 3M product. Except where prohibited by law, 3M will not be liable for any indirect, special, incidental or consequential loss or damage arising from this 3M product, regardless of the legal theory asserted.

3M and Scotch are trademarks of 3M Company.



**Electrical Markets Division** 

6801 River Place Blvd. Austin, TX 78726-9000 800 676 8381 or 800 245 3573 FAX: 800 828 9329 or 800 245 0329 www.3M.com/electrical/oem

Please recycle. © 3M 2014 All rights reserved. 78-8111-0896-4 Rev D

### **X-ON Electronics**

Largest Supplier of Electrical and Electronic Components

Click to view similar products for Adhesive Tapes category:

Click to view products by 3M manufacturer:

Other Similar products are found below:

56-YELLOW-34"X72YD 00-021200-13972-7 021200-64630 60 TAPE (1") 62-GRAY-12"X36YD 62-GRAY-1"X36YD 69-1"X36YD 764
1"x36yd-Red 764-1"x36yd-White 9500PC-3/4 967454-1 1181 19MM X 16,5 METERS 130C-1X15FT E39-RS1-CA 1900-48mm 22
1/2X36YD 88-SUPER-34X44FT 890103N001 2670 96 EVK-TA-TM047NBH01 20-1"X60YDS 2020-18mmx55m H150 363 3900-Blue

3939-24mmx55m 44-TAN-14"X90YD 4504-34x18 471-Trans-1"x36yd-Bulk 5414 34X36 35-Gray-1/2 4008-12"X36YD 4104-34"x18yd

4116 444-1"x36yd 44661" 4466W-1/2"x36yd 4492B-12"x72yd 4492B-1"x72yd 4496W-12"x36yd 4508-1"x36yd 4516-3/8x36 4726

1/2"X36YD 054007-43154 054007-43152 06149 11-32-2857 5419 1/2" 56 TAPE (1/2")