

MATERIAL SAFETY 3M  
 DATA SHEET 3M Center  
 St. Paul, Minnesota  
 55144-1000  
 1-800-364-3577 or (651) 737-6501 (24 hours)

Copyright, 2000, Minnesota Mining and Manufacturing Company.  
 All rights reserved. Copying and/or downloading of this  
 information for the purpose of properly utilizing 3M products  
 is allowed provided that:

- 1) the information is copied in full with no changes unless  
 prior agreement is obtained from 3M, and
- 2) neither the copy nor the original is resold or otherwise  
 distributed with the intention of earning a profit thereon.

DIVISION: ELECTRICAL PRODUCTS DIVISION

TRADE NAME:

3M ELECTRICAL TAPE 27, 69, 90

ISSUED: August 24, 2000

SUPERSEDES: August 12, 1998

DOCUMENT: 07-4974-7

1. INGREDIENT	C.A.S. NO.	PERCENT
GLASS CLOTH.....	65997-17-3	60 - 70
ADHESIVE.....	Unknown	30 - 40

NOTE: The thermoset adhesive may be rubber or silicone.

The glass cloth is electrical grade glass cloth made from continuous  
 glass filaments. The warp yarn is 450 1/0 "D" fiber; the fill yarn is  
 100 1/0 "DE" fiber.

## 2. PHYSICAL DATA

BOILING POINT:..... N/A  
 VAPOR PRESSURE:..... N/A  
 VAPOR DENSITY:..... N/A  
 EVAPORATION RATE:..... N/A  
 SOLUBILITY IN WATER:..... N/A  
 SPECIFIC GRAVITY:..... N/D  
 PERCENT VOLATILE:..... 0 %  
 pH:..... N/A  
 VISCOSITY:..... N/A  
 MELTING POINT:..... N/A

APPEARANCE AND ODOR:

Roll of Tape, White

Abbreviations: N/D - Not Determined N/A - Not Applicable CA - Approximately

MSDS: 3M ELECTRICAL TAPE 27, 69, 90  
August 24, 2000

PAGE 2

---

### 3. FIRE AND EXPLOSION HAZARD DATA

---

FLASH POINT:..... N/A  
FLAMMABLE LIMITS - LEL:..... N/A  
FLAMMABLE LIMITS - UEL:..... N/A  
AUTOIGNITION TEMPERATURE:..... N/D

#### EXTINGUISHING MEDIA:

Water, Carbon dioxide

#### SPECIAL FIRE FIGHTING PROCEDURES:

Wear full protective clothing, including helmet, self-contained, positive pressure or pressure demand breathing apparatus, bunker coat and pants, bands around arms, waist and legs, face mask, and protective covering for exposed areas of the head.

#### UNUSUAL FIRE AND EXPLOSION HAZARDS:

None known.

NFPA HAZARD CODES: HEALTH: 0 FIRE: 0 REACTIVITY: 0

UNUSUAL REACTION HAZARD: none

OSHA FIRE HAZARD CLASS: Not applicable

---

### 4. REACTIVITY DATA

---

STABILITY: Stable

#### INCOMPATIBILITY - MATERIALS/CONDITIONS TO AVOID:

None known.

HAZARDOUS POLYMERIZATION: Hazardous polymerization will not occur.

#### HAZARDOUS DECOMPOSITION PRODUCTS:

Carbon Monoxide and Carbon Dioxide.

---

### 5. ENVIRONMENTAL INFORMATION

---

#### SPILL RESPONSE:

Not applicable.

#### RECOMMENDED DISPOSAL:

Dispose of waste product in a sanitary landfill.

#### ENVIRONMENTAL DATA:

Not determined.

---

Abbreviations: N/D - Not Determined N/A - Not Applicable CA - Approximately

MSDS: 3M ELECTRICAL TAPE 27, 69, 90  
August 24, 2000

PAGE 3

---

5. ENVIRONMENTAL INFORMATION (continued)

---

REGULATORY INFORMATION:

Volatile Organic Compounds: 0 %.  
VOC Less H2O & Exempt Solvents: 0 %.

Since regulations vary, consult applicable regulations or authorities before disposal.

EPCRA HAZARD CLASS:

FIRE HAZARD: No PRESSURE: No REACTIVITY: No ACUTE: No CHRONIC: No

---

6. SUGGESTED FIRST AID

---

EYE CONTACT:

Immediately flush eyes with large amounts of water. Get immediate medical attention.

SKIN CONTACT:

If skin contact with hot material occurs: DO NOT ATTEMPT TO REMOVE MOLTEN MATERIAL. Immediately flush affected area with plenty of cold water and cover with a clean dressing. Have burn treated by a physician.

INHALATION:

If signs/symptoms occur, remove person to fresh air. If signs/symptoms continue, call a physician.

IF SWALLOWED:

Drink two glasses of water. Call a physician.

---

7. PRECAUTIONARY INFORMATION

---

EYE PROTECTION:

Avoid eye contact.

SKIN PROTECTION:

Avoid skin contact with hot material.

Wear gloves and long sleeves if prolonged or repeated exposure to glass fiber tapes is expected.

RECOMMENDED VENTILATION:

Provide appropriate local exhaust for heat curing. If exhaust ventilation is not available, use appropriate respiratory protection.

---

Abbreviations: N/D - Not Determined N/A - Not Applicable CA - Approximately

MSDS: 3M ELECTRICAL TAPE 27, 69, 90  
August 24, 2000

PAGE 4

---

7. PRECAUTIONARY INFORMATION (continued)

---

RESPIRATORY PROTECTION:

Avoid breathing of vapors created during the cure cycle. Avoid breathing of dust created by cutting, sanding or grinding. Select one of the following NIOSH approved respirators based on airborne concentration of contaminants and in accordance with OSHA regulations: half-mask dust respirator, half-mask organic vapor respirator.

PREVENTION OF ACCIDENTAL INGESTION:

Wash hands after handling and before eating.

RECOMMENDED STORAGE:

Store at temperature and conditions as recommended on product literature.

FIRE AND EXPLOSION AVOIDANCE:

Not applicable.

EXPOSURE LIMITS

INGREDIENT	VALUE	UNIT	TYPE	AUTH	SKIN*
GLASS CLOTH.....	10	MG/M3	TWA	3M	
		AS DUST			
ADHESIVE.....	NONE	NONE	NONE	NONE	

\* SKIN NOTATION: Listed substances indicated with 'Y' under SKIN refer to the potential contribution to the overall exposure by the cutaneous route including mucous membrane and eye, either by airborne or, more particularly, by direct contact with the substance. Vehicles can alter skin absorption.

SOURCE OF EXPOSURE LIMIT DATA:

- 3M: 3M Recommended Exposure Guidelines
- NONE: None Established

---

8. HEALTH HAZARD DATA

---

EYE CONTACT:

Vapors from heated material may cause eye irritation.

Mechanical eye irritation: signs/symptoms can include irritation, redness, scratching of the cornea and tearing.

---

Abbreviations: N/D - Not Determined N/A - Not Applicable CA - Approximately

MSDS: 3M ELECTRICAL TAPE 27, 69, 90  
August 24, 2000

PAGE 5

---

8. HEALTH HAZARD DATA (continued)

---

SKIN CONTACT:

Skin Burns (thermal, from contact with hot material): signs/symptoms can include burning pain, red and swollen skin, and blisters.

Mechanical skin irritation: signs/symptoms can include itching and redness.

INHALATION:

Vapors of heated material may cause respiratory system irritation.

Dust from cutting, grinding, sanding or machining may cause irritation of the respiratory system.

IF SWALLOWED:

Ingestion is not a likely route of exposure to this product.

---

SECTION CHANGE DATES

---

INGREDIENTS	SECTION CHANGED SINCE August 12, 1998	ISSUE
-------------	---------------------------------------	-------

---

Abbreviations: N/D - Not Determined N/A - Not Applicable CA - Approximately

---

The information in this Material Safety Data Sheet (MSDS) is believed to be correct as of the date issued. 3M MAKES NO WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR COURSE OF PERFORMANCE OR USAGE OF TRADE. User is responsible for determining whether the 3M product is fit for a particular purpose and suitable for user's method of use or application. Given the variety of factors that can affect the use and application of a 3M product, some of which are uniquely within the user's knowledge and control, it is essential that the user evaluate the 3M product to determine whether it is fit for a particular purpose and suitable for user's method of use or application.

3M provides information in electronic form as a service to its customers. Due to the remote possibility that electronic transfer may have resulted in errors, omissions or alterations in this information, 3M makes no representations as to its completeness or accuracy. In addition, information obtained from a database may not be as current as the information in the MSDS available directly from 3M.

✓