MATERIAL SAFETY

DATA SHEET

3M Center

3M

St. Paul, Minnesota

55144-1000

1-800-364-3577 or (651) 737-6501 (24 hours)

Copyright, 2001, 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.

This material safety data sheet (MSDS) is provided as a courtesy in response to a customer request. This product is not regulated under, and a MSDS is not required for this product by the OSHA Hazard Communication Standard (29 CFR 1910.1200) because, when used as recommended or under ordinary conditions, it should not present a health and safety hazard. However, use or processing of the product not in accordance with the product's recommendations or not under ordinary conditions may affect the performance of the product and may present potential health and safety hazards.

DIVISION: ELECTRICAL PRODUCTS DIVISION

TRADE NAME:

3M Electrical Tape 79FR ISSUED: July 30, 2001 SUPERSEDES: INITIAL ISSUE

DOCUMENT: 16-4402-0

1. INGREDIENT C.A.S. NO. PERCENT

 FLAME RETARDANT ACRYLATE ADHESIVE.....
 Unknown
 40
 - 60

 Glass Cloth.....
 65997-17-3
 40
 - 60

 Urethane Release Coating.....
 Unknown
 0.001
 - 0.01

The components of this product are in compliance with the chemical notification requirements of TSCA. This product is an article as defined by TSCA regulations, and is exempt from TSCA Inventory listing requirements.

2. PHYSICAL DATA

BOILING POINT: ... N/A
VAPOR PRESSURE: ... N/A
VAPOR DENSITY: ... N/A
EVAPORATION RATE: ... N/A
SOLUBILITY IN WATER: ... N/D

SPECIFIC GRAVITY:..... ca. 1.2 Water=1

PERCENT VOLATILE:.... neglig. %

July 30, 2001 PAGE 2

2. PHYSICAL DATA (continued)

MSDS: 3M Electrical Tape 79FR

 pH:
 N/A

 VISCOSITY:
 N/A

 MELTING POINT:
 N/A

APPEARANCE AND ODOR:

Roll of Tape, white, rubber odor

3. FIRE AND EXPLOSION HAZARD DATA

EXTINGUISHING MEDIA:

Water, Carbon dioxide, Dry chemical, Foam

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:

No unusual fire or explosion hazards are anticipated. See Hazardous Decomposition section for products of combustion.

NFPA HAZARD CODES: HEALTH: 2 FIRE: 1 REACTIVITY: 0 UNUSUAL REACTION HAZARD: none

OSHA FIRE HAZARD CLASS: Not applicable

4. REACTIVITY DATA

STABILITY: Stable

INCOMPATIBILITY - MATERIALS/CONDITIONS TO AVOID:

Strong Oxidizing Agents. None known. Reactive Metals, Finely divided active metals, Metal Powder. Reactions with metals in powder form occur from 370 C onwards. Al or Mg powder and high shear/temperature conditions.

HAZARDOUS POLYMERIZATION: Hazardous polymerization will not occur.

MSDS: 3M Electrical Tape 79FR

July 30, 2001

PAGE 3

4. REACTIVITY DATA (continued)

HAZARDOUS DECOMPOSITION PRODUCTS:

Under recommended usage conditions, hazardous decomposition products are not expected. Hazardous decomposition products anticipated as a result of oxidation (excluding burning), heating, or reaction with another material may include: Carbon Monoxide and Carbon Dioxide, Hydrocarbons, Hydrogen Bromide, Oxides of Antimony, Isocyanates, Irritant Vapors or Gases.

5. ENVIRONMENTAL INFORMATION

SPILL RESPONSE:

Not applicable.

RECOMMENDED DISPOSAL:

Dispose of waste product in a sanitary landfill.

ENVIRONMENTAL DATA:

Not determined.

REGULATORY INFORMATION:

Volatile Organic Compounds: N/D. VOC Less H2O & Exempt Solvents: N/D.

Since regulations vary, consult applicable regulations or authorities before disposal. U.S. EPA Hazardous Waste Number = None (Not U.S. EPA Hazardous).

EPCRA HAZARD CLASS:

FIRE HAZARD: NO PRESSURE: NO REACTIVITY: NO ACUTE: NO CHRONIC: NO

6. SUGGESTED FIRST AID

EYE CONTACT:

No need for first aid is anticipated.

SKIN CONTACT:

No need for first aid is anticipated.

INHALATION:

No need for first aid is anticipated.

IF SWALLOWED:

No need for first aid is anticipated.

MSDS: 3M Electrical Tape 79FR

July 30, 2001

PAGE 4

7. PRECAUTIONARY INFORMATION

EYE PROTECTION:

Avoid eye contact.

SKIN PROTECTION:

Avoid prolonged or repeated skin contact.

RECOMMENDED VENTILATION:

Not applicable.

RESPIRATORY PROTECTION:

Avoid breathing of thermal decomposition products.

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.

HMIS HAZARD RATINGS: HEALTH: 1 FLAMMABILITY: 1 REACTIVITY: 0

PERSONAL PROTECTION: B

EXPOSURE LIMITS

INGREDIENT	VALUE	UNIT	TYPE	AUTH	SKIN*
FLAME RETARDANT ACRYLATE ADHESIVE Glass Cloth	NONE 10 AS D	NONE MG/M3 OUST	NONE TWA	NONE 3M	
Urethane Release Coating	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

MSDS: 3M Electrical Tape 79FR

July 30, 2001

PAGE 5

8. HEALTH HAZARD DATA

EYE CONTACT:

Eye contact is not expected to occur during normal use of the product.

SKIN CONTACT:

No adverse health effects are expected from skin contact.

Health effects from inhalation are not expected unless the product is over heated and decomposition occurs.

IF SWALLOWED:

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

OTHER HEALTH HAZARD INFORMATION:

This product, when used under reasonable conditions or in accordance with the 3M directions for use, should not present a health and safety hazard. However, use or processing of the product in a manner not in accordance with the product's directions for use may affect the performance of the product and may present potential health and safety hazards.

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.