

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

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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 BRAND ELECTRICAL INSULATING TAPE Super 33+ and Super 88.

ISSUED: October 29, 2001

SUPERSEDES: September 10, 2001

DOCUMENT: 10-9735-1

1. INGREDIENT	C.A.S. NO.	PERCENT
POLYVINYL CHLORIDE FILM WITH RUBBER		
BASED ADHESIVE.....	None	100.0
ANTIMONY TRIOXIDE.....	1309-64-4	1 - 2
ZINC OXIDE.....	1314-13-2	< 0.15
PVC FILM BACKING.....	Mixture	80 - 95
POLY(VINYL CHLORIDE).....	9002-86-2	50 - 60
POLYESTER RESN.....	TradeSecret	25 - 35
DI-C8-10-BRANCHED ALKYL PHTHALATE, C9		
RICH.....	68515-48-0	1 - 5
LEAD OXIDE PHOSPHONATE.....	12141-20-7	1 - 3

This product contains the following toxic chemical or chemicals subject to  
the reporting requirements of Section 313 of Title III of the Emergency  
Planning and Community Right-To-Know Act of 1986 and 40 CFR Part 372:

ANTIMONY TRIOXIDE

ZINC OXIDE

PVC FILM BACKING

LEAD OXIDE PHOSPHONATE

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

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

APPEARANCE AND ODOR:

Black Tape

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3. FIRE AND EXPLOSION HAZARD DATA  
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FLASH POINT:..... N/A  
FLAMMABLE LIMITS - LEL:..... N/A  
FLAMMABLE LIMITS - UEL:..... N/A  
AUTOIGNITION TEMPERATURE:..... N/D

EXTINGUISHING MEDIA:

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:

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

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4. REACTIVITY DATA  
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STABILITY: Stable

INCOMPATIBILITY - MATERIALS/CONDITIONS TO AVOID:

Strong Oxidizing Agents, Finely divided active metals. Not applicable.

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4. REACTIVITY DATA (continued)  
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HAZARDOUS POLYMERIZATION: Hazardous polymerization will not occur.

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, Hydrogen Chloride, Hydrocarbons, Oxides of Zinc, Oxides of Lead, Oxides of Antimony, Toxic Vapors, Gases or Particulates, Irritant Vapors or Gases

Conditions of extreme heat or fire conditions needed for decomposition to occur.

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5. ENVIRONMENTAL INFORMATION  
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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: Yes CHRONIC: Yes

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6. SUGGESTED FIRST AID  
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EYE CONTACT:

No need for first aid is anticipated.

SKIN CONTACT:

No need for first aid is anticipated.

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

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6. SUGGESTED FIRST AID (continued)  
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INHALATION:

No need for first aid is anticipated.

IF SWALLOWED:

No need for first aid is anticipated.

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7. PRECAUTIONARY INFORMATION  
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EYE PROTECTION:

Avoid eye contact.

SKIN PROTECTION:

Avoid prolonged or repeated skin contact.

RECOMMENDED VENTILATION:

Use in a well-ventilated area.

RESPIRATORY PROTECTION:

Avoid breathing of thermal decomposition products.

PREVENTION OF ACCIDENTAL INGESTION:

Wash hands after handling and before eating. Do not ingest.

RECOMMENDED STORAGE:

Store in a cool place.

FIRE AND EXPLOSION AVOIDANCE:

Keep away from heat, sparks, open flame, and other sources of ignition.

OTHER PRECAUTIONARY INFORMATION:

A Material Safety Data Sheet (MSDS) is not required by the OSHA Hazard Communication Standard (29CFR 1910.1200) for this product. This MSDS is provided as a service to customers.

HMIS HAZARD RATINGS: HEALTH: 2 FLAMMABILITY: 1 REACTIVITY: 0  
PERSONAL PROTECTION: X

EXPOSURE LIMITS

INGREDIENT	VALUE	UNIT	TYPE	AUTH	SKIN*
-----					
POLYVINYL CHLORIDE FILM WITH					
RUBBER BASED ADHESIVE.....	NONE	NONE	NONE	NONE	
ANTIMONY TRIOXIDE.....	0.5	MG/M3	TWA	ACGIH	
		as Sb			
ZINC OXIDE.....	10	MG/M3	TWA	ACGIH	
		AS DUST			
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Abbreviations: N/D - Not Determined N/A - Not Applicable CA - Approximately

EXPOSURE LIMITS (continued)

INGREDIENT	VALUE	UNIT	TYPE	AUTH	SKIN*
ZINC OXIDE.....	10	MG/M3	TWA	OSHAV	
	AS DUST				
	OSHA VACATED PEL				
ZINC OXIDE.....	5	MG/M3	TWA	ACGIH	
	as fume				
ZINC OXIDE.....	10	MG/M3	STEL	ACGIH	
	as fume				
ZINC OXIDE.....	5	MG/M3	TWA	OSHA	
	as fume				
ZINC OXIDE.....	10	MG/M3	STEL	OSHAV	
	as fume				
	OSHA VACATED PEL				
ZINC OXIDE.....	15	MG/M3	TWA	OSHA	
	AS TOTAL DUST				
ZINC OXIDE.....	5	MG/M3	TWA	OSHA	
	RESPIRABLE				
PVC FILM BACKING.....	0.05	MG/M3	TWA	ACGIH	
	as Pb				
PVC FILM BACKING.....	0.05	MG/M3	TWA	OSHA	
	as Pb				
POLY(VINYL CHLORIDE).....	NONE	NONE	NONE	NONE	
POLYESTER RESN.....	NONE	NONE	NONE	NONE	
DI-C8-10-BRANCHED ALKYL PHTHALATE, C9 RICH.....	5	MG/M3	TWA	CMRG	
LEAD OXIDE PHOSPHONATE.....	0.05	MG/M3	TWA	ACGIH	
	as Pb				
LEAD OXIDE PHOSPHONATE.....	0.05	MG/M3	TWA	OSHA	
	as Pb				

\* 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:

- ACGIH: American Conference of Governmental Industrial Hygienists
- CMRG: Chemical Manufacturer Recommended Exposure Guidelines
- OSHA: Occupational Safety and Health Administration
- OSHAV: Occupational Safety and Health Administration Vacated PEL.  
Vacated Permissible Exposure Limits (PEL) are enforced as the OSHA PEL in some states. Check with your local regulatory authority.
- NONE: None Established

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

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8. HEALTH HAZARD DATA  
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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.

Contact with the skin during product use is not expected to result in significant irritation.

INHALATION:

No adverse health effects are expected from inhalation exposure.

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

If thermal decomposition occurs:

Irritation (upper respiratory): signs/symptoms can include soreness of the nose and throat, coughing and sneezing.

IF SWALLOWED:

No adverse health effects are expected from swallowing.

CANCER:

WHILE THE FOLLOWING EFFECTS ARE ASSOCIATED WITH ONE OR MORE OF THE INDIVIDUAL INGREDIENTS IN THIS PRODUCT AND ARE REQUIRED TO BE INCLUDED ON THE MSDS BY THE U.S. OSHA HAZARD COMMUNICATION STANDARD, THEY ARE NOT EXPECTED EFFECTS DURING FORESEEABLE USE OF THIS PRODUCT.

WARNING: Contains a chemical which can cause cancer. (12141-20-7)  
(IARC possible human carcinogen 2B - Inorganic Lead Compounds, ACGIH animal carcinogen A3 - Inorganic Lead Compounds, Calif. Proposition 65 - Lead Compounds)

WARNING: Contains a chemical which can cause cancer. (1309-64-4)  
(ACGIH suspected human carcinogen A2, IARC possible human carcinogen 2B, Calif. Proposition 65)

REPRODUCTIVE/DEVELOPMENTAL TOXINS:

WHILE THE FOLLOWING EFFECTS ARE ASSOCIATED WITH ONE OR MORE OF THE INDIVIDUAL INGREDIENTS IN THIS PRODUCT AND ARE REQUIRED TO BE INCLUDED ON THE MSDS BY THE U.S. OSHA HAZARD COMMUNICATION STANDARD, THEY ARE NOT EXPECTED EFFECTS DURING FORESEEABLE USE OF THIS PRODUCT.

WARNING: Contains a chemical which can cause birth defects, reproductive harm, and developmental effects. (12141-20-7)

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

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8. HEALTH HAZARD DATA (continued)  
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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.

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SECTION CHANGE DATES  
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HEADING	SECTION CHANGED SINCE September 10, 2001 ISSUE
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