

MATERIAL SAFETY 3M
 DATA SHEET 3M Center
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DIVISION: ELECTRICAL PRODUCTS DIVISION

TRADE NAME:

3M BRAND CABLE REPAIR COMPOUND

ID NUMBER/U.P.C.:

78-8019-0037-0 - - - 80-6101-0569-6 00-54007-33285-5
 80-6107-3090-7 - - -

ISSUED: April 16, 2001

SUPERSEDES: December 01, 1997

DOCUMENT: 10-2631-9

1. INGREDIENT	C.A.S. NO.	PERCENT
PART A: 1,1'-		
METHYLENEBIS(ISOCYANAOBENZENE).....	26447-40-5	12 - 17
P,P'-METHYLENEBIS(PHENYL ISOCYANATE)....	101-68-8	10 - 15
1,3-BUTADIENE, HOMOPOLYMER, HYDROXY- TERMINATED.....	69102-90-5	6 - 9
1,2-BENZENEDICARBOXYLIC ACID, DIUNDECYL ESTER, BRANCHED AND LINEAR.....	85507-79-5	3 - 6
BENZENE, 1,1'-METHYLENEBIS[ISOCYANATO-, HOMOPOLYMER.....	39310-05-9	3 - 6
GLYCOLS, POLYPROPYLENE.....	25322-69-4	2 - 3.5
TRIETHYL PHOSPHATE.....	78-40-0	< .376
PART B: 1,3-BUTADIENE, HOMOPOLYMER,		
HYDROXY-TERMINATED.....	69102-90-5	20 - 30
GLYCOLS, POLYPROPYLENE.....	25322-69-4	8 - 11
DIUNDECYL PHTHALATE.....	3648-20-2	8 - 11
N,N-DI(2-HYDROXYPROPYL)ANILINE.....	3077-13-2	5 - 8
DIPROPYLENE GLYCOL.....	25265-71-8	3 - 5
1,2-BENZENEDICARBOXYLIC ACID, DIUNDECYL ESTER, BRANCHED AND LINEAR.....	85507-79-5	2.5 - 5
4,4'-METHYLENEBIS(2,6-DIETHYLANILINE)...	13680-35-8	2 - 3
ALUMINUM POTASSIUM SODIUM SILICATE.....	12736-96-8	1.5 - 2
CARBON BLACK.....	1333-86-4	1.5 - 2
CASTOR OIL.....	8001-79-4	1.5 - 2
HYDROCINNAMIC ACID, 3,5-DI-TERT-BUTYL-4- HYDROXY-, OCTADECYL ESTER.....	2082-79-3	.5 - 1

NOTE: INGREDIENTS LISTED ON TSCA;EINECS,CDSL;AICS CHEMICAL
 INVENTORIES.

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

1. INGREDIENT	C.A.S. NO.	PERCENT
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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:
P,P'-METHYLENEBIS(PHENYL ISOCYANATE)

2. PHYSICAL DATA

BOILING POINT:..... N/D
VAPOR PRESSURE:..... N/D
VAPOR DENSITY:..... N/D
EVAPORATION RATE:..... N/D
SOLUBILITY IN WATER:..... Reacts
SPECIFIC GRAVITY:..... 0.98 - 1.08 g/cc
PRE.:1.08 POL.:0.98
PERCENT VOLATILE:..... N/D
0
pH:..... N/A
VISCOSITY:..... 1100 - 5000 centipoise
MELTING POINT:..... N/D

APPEARANCE AND ODOR:

PREPOLYMER:Clear amber liquid POLYOL: Black viscous liquid

3. FIRE AND EXPLOSION HAZARD DATA

FLASH POINT:..... N/D
Both>230F Closed Cup
FLAMMABLE LIMITS - LEL:..... N/D
FLAMMABLE LIMITS - UEL:..... N/D
AUTOIGNITION TEMPERATURE:..... N/D

EXTINGUISHING MEDIA:

Water spray, 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.
Closed containers exposed to heat from fire may build pressure and explode.

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3. FIRE AND EXPLOSION HAZARD DATA (continued)

NFPA HAZARD CODES: HEALTH: 2 FIRE: 2 REACTIVITY: 1
UNUSUAL REACTION HAZARD: reacts with water

OSHA FIRE HAZARD CLASS: Class IIIB Combustible Liquid

4. REACTIVITY DATA

STABILITY: Stable

INCOMPATIBILITY - MATERIALS/CONDITIONS TO AVOID:

Strong Bases, Amines, Alcohols, Water. Reaction with water, alcohols and amines is not hazardous if container can vent to the atmosphere to prevent pressure buildup.

This refers to the Part A (prepolymer).

HAZARDOUS POLYMERIZATION: Hazardous polymerization will not occur.

HAZARDOUS DECOMPOSITION PRODUCTS:

Carbon Monoxide and Carbon Dioxide, Oxides of Nitrogen, Hydrogen Cyanide, Isocyanates, Toxic Vapors, Gases or Particulates, Irritant Vapors or Gases.

5. ENVIRONMENTAL INFORMATION

SPILL RESPONSE:

Refer to other sections of this MSDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment. Pour isocyanate decontaminant solution (90% water, 8% concentrated ammonia, 2% detergent) on spill and allow to react for 10 minutes. Alternatively, pour water on spill and allow to react for more than 30 minutes. Cover with absorbent. Place in an approved drum, but do not seal the drum for 48 hours to avoid possible pressure buildup. Neutralize spill residue with decontaminant solution.

RECOMMENDED DISPOSAL:

Incinerate in an industrial or commercial facility. Dispose of completely cured (or polymerized) material in a sanitary landfill.

ENVIRONMENTAL DATA:

No data available.

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

5. ENVIRONMENTAL INFORMATION (continued)

REGULATORY INFORMATION:

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

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

EPCRA HAZARD CLASS:

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

6. SUGGESTED FIRST AID

EYE CONTACT:

Immediately flush eyes with large amounts of water for at least 15
minutes. Get immediate medical attention.

SKIN CONTACT:

Flush skin with large amounts of water. If irritation persists, get
medical attention. Immediately wash skin with soap and large amounts
of water. Remove contaminated clothing. If signs/symptoms occur, call
a physician. Wash contaminated clothing before reuse and dispose of
contaminated shoes.

INHALATION:

Remove person to fresh air. If not breathing, give artificial
respiration. If breathing is difficult, get immediate medical
attention.

IF SWALLOWED:

Do not induce vomiting. Drink two glasses of water. Call a physician.

7. PRECAUTIONARY INFORMATION

EYE PROTECTION:

Avoid eye contact. Wear safety glasses with side shields.

SKIN PROTECTION:

Avoid prolonged or repeated skin contact. Wear appropriate gloves
when handling this material. Use one or more of the following
personal protection items as necessary to prevent skin contact:
apron, coveralls.

RECOMMENDED VENTILATION:

Provide appropriate local exhaust for heat curing. Use in a well-
ventilated area. If exhaust ventilation is not available, use
appropriate respiratory protection.

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7. PRECAUTIONARY INFORMATION (continued)

RESPIRATORY PROTECTION:

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

PREVENTION OF ACCIDENTAL INGESTION:

Wash hands after handling and before eating.

RECOMMENDED STORAGE:

Store in a cool place. Keep container closed when not in use.

FIRE AND EXPLOSION AVOIDANCE:

Prevent all sources of ignition. No smoking while handling this material. Do not heat under confinement.

EXPOSURE LIMITS

INGREDIENT	VALUE	UNIT	TYPE	AUTH	SKIN*

PART A: 1,1'-					
METHYLENEBIS(ISOCYANAOBENZENE).....	0.005	PPM	TWA	ACGIH	
PART A: 1,1'-					
METHYLENEBIS(ISOCYANAOBENZENE).....	0.02	PPM	CEIL	OSHA	
P,P'-METHYLENEBIS(PHENYL					
ISOCYANATE).....	0.02	PPM	CEIL	OSHA	
P,P'-METHYLENEBIS(PHENYL					
ISOCYANATE).....	0.005	PPM	TWA	ACGIH	
1,3-BUTADIENE, HOMOPOLYMER,					
HYDROXY-TERMINATED.....	NONE	NONE	NONE	NONE	
1,2-BENZENEDICARBOXYLIC ACID,					
DIUNDECYL ESTER, BRANCHED AND					
LINEAR.....	NONE	NONE	NONE	NONE	
BENZENE, 1,1'-					
METHYLENEBIS[ISOCYANATO-,					
HOMOPOLYMER.....	NONE	NONE	NONE	NONE	
GLYCOLS, POLYPROPYLENE.....	10	MG/M3	TWA	AIHA	
		AS PARTICULATE			
TRIETHYL PHOSPHATE.....	NONE	NONE	NONE	NONE	
PART B: 1,3-BUTADIENE, HOMOPOLYMER,					
HYDROXY-TERMINATED.....	NONE	NONE	NONE	NONE	
GLYCOLS, POLYPROPYLENE.....	10	MG/M3	TWA	AIHA	
		AS PARTICULATE			
DIUNDECYL PHTHALATE.....	NONE	NONE	NONE	NONE	
N,N-DI(2-HYDROXYPROPYL)ANILINE.....	NONE	NONE	NONE	NONE	
DIPROPYLENE GLYCOL.....	NONE	NONE	NONE	NONE	
1,2-BENZENEDICARBOXYLIC ACID,					

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

EXPOSURE LIMITS (continued)

INGREDIENT	VALUE	UNIT	TYPE	AUTH	SKIN*
DIUNDECYL ESTER, BRANCHED AND LINEAR.....	NONE	NONE	NONE	NONE	
4,4'-METHYLENEBIS(2,6-DIETHYLANILINE).....	NONE	NONE	NONE	NONE	
ALUMINUM POTASSIUM SILICATE...	NONE	NONE	NONE	NONE	
CARBON BLACK.....	3.5	MG/M3	TWA	ACGIH	
CARBON BLACK.....	3.5	MG/M3	TWA	OSHA	
CARBON BLACK.....	0.5	MG/M3	TWA	CMRG	
CASTOR OIL.....	10	MG/M3	TWA	OSHA	
	AS MIST				
HYDROCINNAMIC ACID, 3,5-DI-TERT-BUTYL-4-HYDROXY-, OCTADECYL ESTER..	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:

- ACGIH: American Conference of Governmental Industrial Hygienists
- AIHA: American Industrial Hygiene Assoc. Workplace Environmental Exposure Level Guideline
- CMRG: Chemical Manufacturer Recommended Exposure Guidelines
- OSHA: Occupational Safety and Health Administration
- NONE: None Established

8. HEALTH HAZARD DATA

EYE CONTACT:

Severe Eye Irritation: signs/symptoms can include redness, swelling, pain, tearing, cloudy appearance of the cornea, impaired vision and possible permanently impaired vision.

SKIN CONTACT:

Allergic Skin Reaction: signs/symptoms can include redness, swelling, blistering, and itching.

Moderate Skin Irritation: signs/symptoms can include redness, swelling, itching, and dryness.

Allergic contact dermatitis may occur in certain susceptible individuals after contact with Part A (prepolymer) and the mixture of Part A with Part B (polyol).

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8. HEALTH HAZARD DATA (continued)

INHALATION:

Serious illness requiring medical attention or death may result from a single exposure by inhalation to a relatively small amount of this material.

Prolonged or repeated overexposure, above recommended guidelines, may cause:

Allergic Respiratory Reaction: signs/symptoms can include difficulty breathing, wheezing, tightness of chest, and respiratory failure.

Nervous System Effects: signs/symptoms can include emotional changes, lack of coordination, tremors and sensory loss.

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

Lung Damage: signs/symptoms can include coughing, difficulty breathing, wheezing, tightness in chest, congestion, and coughing up of blood.

IF SWALLOWED:

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

Illness may result from a single swallowing of a moderate quantity of this material.

Irritation of Gastrointestinal Tissues: signs/symptoms can include pain, vomiting, abdominal tenderness, nausea, blood in vomitus, and blood in feces.

Irritation of the Oral Mucosa: signs/symptoms can include bleeding, redness, swelling, and pain of the gums.

Aspiration Pneumonitis: signs/symptoms can include coughing, difficulty breathing, wheezing, coughing up blood and pneumonia, which can be fatal.

CANCER:

WARNING: Contains a chemical which can cause cancer. (1333-86-4)
(IARC possible human carcinogen 2B)

REPRODUCTIVE/DEVELOPMENTAL TOXINS:

TRIETHYL PHOSPHATE (CAS 78-40-0); Some organophosphates have caused lower fetal or birth weights and/or higher neonatal mortality. This material also caused male reproductive effects in rats.

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SECTION CHANGE DATES

PRECAUTIONARY INFO. SECTION CHANGED SINCE December 01, 1997 ISSUE

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