

MATERIAL SAFETY 3M
 DATA SHEET 3M Center
 St. Paul, Minnesota
 55144-1000
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DIVISION: TELECOM SYSTEMS DIVISION
 TRADE NAME:

SCOTCHCAST 4403 ENCAPSULATING COMPOUND FOR KITS: 8960, 8961, 8963,
 3832, 3832S

ID NUMBER/U.P.C.:

80-6100-6280-6 - - - 80-6100-6281-4 00-54007-30609-2
 80-6100-6282-2 00-54007-30610-8 80-6100-6596-5 00-54007-30784-6
 80-6100-9020-3 00-54007-32224-5 80-6107-7165-3 00-54007-91663-5

ISSUED: March 22, 2000
 SUPERSEDES: March 15, 2000
 DOCUMENT: 10-3070-9

1. INGREDIENT	C.A.S. NO.	PERCENT
PART A (PREPOLYMER):.....	Mixture	50
DITRIDECYL PHTHALATE.....	119-06-2	30.0 - 45.0
MDI POLYURETHANE PREPOLYMER.....	68442-03-5	15.0 - 25.0
POLYMETHYLENE POLYPHENYLENE ISOCYANATE..	9016-87-9	15.0 - 25.0
P,P'-METHYLENEBIS(PHENYL ISOCYANATE)....	101-68-8	15.0 - 20.0
DIPHENYLMETHANE DIISOCYANATE (MDI).....	26447-40-5	1.0 - 5.0
C.I. SOLVENT YELLOW 3.....	97-56-3	< 0.015
PART B (POLYOL):.....	Mixture	50
PROPYLENE GLYCOL GLYCEROL TRIETHER.....	25791-96-2	55.0 - 65.0
DITRIDECYL PHTHALATE.....	119-06-2	10.0 - 20.0
N,N-DI(2-HYDROXYPROPYL)ANILINE.....	3077-13-2	10.0 - 20.0
DIPROPYLENE GLYCOL.....	25265-71-8	5.0 - 10.0

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:
 POLYMETHYLENE POLYPHENYLENE ISOCYANATE
 P,P'-METHYLENEBIS(PHENYL ISOCYANATE)
 C.I. SOLVENT YELLOW 3

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

2. PHYSICAL DATA

BOILING POINT:..... N/A
VAPOR PRESSURE:..... < 0.00001 mmHg
 @ 77F(MDI)
VAPOR DENSITY:..... 8.5 Air=1
 (MDI)
EVAPORATION RATE:..... N/A
SOLUBILITY IN WATER:..... Part A: Reacts. Part B: Insoluble.
SPECIFIC GRAVITY:..... PART A: 1.05. PART B: 1.01.
PERCENT VOLATILE:..... N/A
pH:..... N/A
VISCOSITY:..... PART A: ~2000 cps. PART B:~450 cps.
MELTING POINT:..... N/D

APPEARANCE AND ODOR:

Part A: Dark green,viscous liquid. Part B: Amber, oily liquid.

3. FIRE AND EXPLOSION HAZARD DATA

FLASH POINT:..... > 270 F TCC
 PARTS A & B
FLAMMABLE LIMITS - LEL:..... N/D
FLAMMABLE LIMITS - UEL:..... N/D
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: 1
UNUSUAL REACTION HAZARD: none

OSHA FIRE HAZARD CLASS: Class IIIB Combustible Liquid

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4. REACTIVITY DATA

STABILITY: Stable

INCOMPATIBILITY - MATERIALS/CONDITIONS TO AVOID:

Strong Oxidizing Agents. Reaction with water, alcohols and amines is not hazardous if container can vent to the atmosphere to prevent pressure buildup.

HAZARDOUS POLYMERIZATION: Hazardous polymerization will not occur.

HAZARDOUS DECOMPOSITION PRODUCTS:

Carbon Monoxide and Carbon Dioxide, Oxides of Nitrogen, Hydrogen Cyanide.

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. Contain spill. 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. Dispose of empty cans in a sanitary landfill.

ENVIRONMENTAL DATA:

Not determined.

REGULATORY INFORMATION:

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

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: Yes ACUTE: Yes CHRONIC: Yes

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6. SUGGESTED FIRST AID

EYE CONTACT:

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

SKIN CONTACT:

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:

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 skin contact. Gloves not normally required.

Gloves should be worn for cleanup of spills or leakage where skin contact is possible.

RECOMMENDED VENTILATION:

Provide sufficient ventilation to maintain emissions below recommended exposure limits. If exhaust ventilation is not adequate, use appropriate respiratory protection.

RESPIRATORY PROTECTION:

Avoid 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 supplied air respirator.

PREVENTION OF ACCIDENTAL INGESTION:

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

RECOMMENDED STORAGE:

Keep out of the reach of children.

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 7. PRECAUTIONARY INFORMATION (continued)

FIRE AND EXPLOSION AVOIDANCE:
 Prevent all sources of ignition.

EXPOSURE LIMITS

INGREDIENT	VALUE	UNIT	TYPE	AUTH	SKIN*
PART A (PREPOLYMER):.....	NONE	NONE	NONE	NONE	
DITRIDECYL PHTHALATE.....	NONE	NONE	NONE	NONE	
MDI POLYURETHANE PREPOLYMER.....	NONE	NONE	NONE	NONE	
POLYMETHYLENE POLYPHENYLENE ISOCYANATE.....	NONE	NONE	NONE	NONE	
P,P'-METHYLENEBIS(PHENYL ISOCYANATE).....	0.02	PPM	CEIL	OSHA	
P,P'-METHYLENEBIS(PHENYL ISOCYANATE).....	0.005	PPM	TWA	ACGIH	
DIPHENYLMETHANE DIISOCYANATE (MDI)...	0.005	PPM	TWA	ACGIH	
DIPHENYLMETHANE DIISOCYANATE (MDI)...	0.02	PPM	CEIL	OSHA	
C.I. SOLVENT YELLOW 3.....	NONE	NONE	NONE	NONE	
PART B (POLYOL):.....	NONE	NONE	NONE	NONE	
PROPYLENE GLYCOL GLYCEROL TRIETHER...	NONE	NONE	NONE	NONE	
DITRIDECYL PHTHALATE.....	NONE	NONE	NONE	NONE	
N,N-DI(2-HYDROXYPROPYL)ANILINE.....	2	PPM	TWA	ACGIH	Y
DIPROPYLENE GLYCOL.....	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
- OSHA: Occupational Safety and Health Administration
- NONE: None Established

 8. HEALTH HAZARD DATA

EYE CONTACT:

Mild Eye Irritation: signs/symptoms can include redness, swelling, pain, and tearing.

SKIN CONTACT:

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

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8. HEALTH HAZARD DATA (continued)

Prolonged or repeated exposure may cause:

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

INHALATION:

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

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

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

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

IF SWALLOWED:

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

CANCER:

WARNING: Contains a chemical which can cause cancer. (97-56-3) (NTP
anticipated human carcinogen, IARC possible human carcinogen 2B,
Calif. Proposition 65)

SECTION CHANGE DATES

HEADING	SECTION CHANGED SINCE March 15, 2000	ISSUE
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