

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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DIVISION: TELECOM SYSTEMS DIVISION
TRADE NAME:
4416 DUCT SEALING KIT AND K&B VAULT CLOSURE REHAB KIT
ID NUMBER/U.P.C. :
80-6105-8221-7 00-54007-57217-6 80-6105-8224-1 00-54007-57220-6
ISSUED: August 27, 1996
SUPERSEDES: March 02, 1995
DOCUMENT: 11-6112-4

This product is a kit or a multipart product which consists of multiple,
independently packaged components. An MSDS for each of these components is
included. Please do not separate the component MSDSs from this cover page.
The document numbers of the MSDSs for components of this product are:

10-2416-5
11-6111-6

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

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DIVISION: TELECOM SYSTEMS DIVISION
 TRADE NAME:

S'CAST FILLED CABLE CLEANER and 4414 & 4415 KITS
 ID NUMBER/U.P.C.:
 78-8075-6484-0 - - - 80-6105-8222-5 00-54007-57218-3
 80-6105-8223-3 00-54007-57219-0
 ISSUED: December 04, 2000
 SUPERSEDES: April 17, 2000
 DOCUMENT: 11-6111-6

1. INGREDIENT	C.A.S. NO.	PERCENT	
D-LIMONENE.....	5989-27-5	40.0	- 60.0
ALKYLATE PETROLEUM DISTILLATES.....	68551-20-2	40.0	- 60.0

2. PHYSICAL DATA

BOILING POINT:..... N/D
 VAPOR PRESSURE:..... N/D
 VAPOR DENSITY:..... N/D
 EVAPORATION RATE:..... N/D
 SOLUBILITY IN WATER:..... neglig.
 SPECIFIC GRAVITY:..... ca. 0.830 Water=1
 PERCENT VOLATILE:..... ca. 100.00 %
 pH:..... N/A
 VISCOSITY:..... N/D
 MELTING POINT:..... N/D

APPEARANCE AND ODOR:
 liquid, colorless to pale yellow, citrus odor

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

3. FIRE AND EXPLOSION HAZARD DATA

FLASH POINT:..... 122.00 F TCC
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:
Vapors may travel long distances along the ground or floor to an ignition source and flash back.

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

4. REACTIVITY DATA

STABILITY: Stable

INCOMPATIBILITY - MATERIALS/CONDITIONS TO AVOID:
Not applicable.

HAZARDOUS POLYMERIZATION: Hazardous polymerization will not occur.

HAZARDOUS DECOMPOSITION PRODUCTS:
Carbon Monoxide and Carbon Dioxide.

5. ENVIRONMENTAL INFORMATION

SPILL RESPONSE:
Observe precautionary information from other sections. Cover the spill with an absorbent material and sweep up. Place all cleaned up material and solvent laden rags into a metal drum.

RECOMMENDED DISPOSAL:
Used or spilled product should be incinerated in a permitted facility or absorbed on an absorbent material and landfilled in accordance with applicable regulations. Since regulations vary, consult applicable regulations or authorities before disposal.

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

5. ENVIRONMENTAL INFORMATION (continued)

ENVIRONMENTAL DATA:

US EPA Hazardous Waste Number: D001
VOC: 830 grams/liter maximum Volatile Organic Compound

REGULATORY INFORMATION:

Volatile Organic Compounds: ca. 830.00 gms/liter.
VOC Less H2O & Exempt Solvents: N/D.

EPCRA HAZARD CLASS:

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

6. SUGGESTED FIRST AID

EYE CONTACT:

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

SKIN CONTACT:

Flush skin with large amounts of water. If irritation persists, get medical attention.

INHALATION:

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

IF SWALLOWED:

If swallowed, call a physician immediately. Only induce vomiting at the instruction of a physician. Never give anything by mouth to an unconscious person.

7. PRECAUTIONARY INFORMATION

EYE PROTECTION:

Avoid eye contact. Wear safety glasses with side shields.

SKIN PROTECTION:

Avoid prolonged or repeated skin contact.

RECOMMENDED VENTILATION:

Use with adequate dilution ventilation.

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

7. PRECAUTIONARY INFORMATION (continued)

RESPIRATORY PROTECTION:

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 at room temperature.

FIRE AND EXPLOSION AVOIDANCE:

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

EXPOSURE LIMITS

INGREDIENT	VALUE	UNIT	TYPE	AUTH	SKIN*
D-LIMONENE.....	30	PPM	TWA	AIHA	
ALKYLATE PETROLEUM DISTILLATES.....	400	PPM	TWA	CMRG	

* 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:

- AIHA: American Industrial Hygiene Assoc. Workplace Environmental Exposure Level Guideline
- CMRG: Chemical Manufacturer Recommended Exposure Guidelines

8. HEALTH HAZARD DATA

EYE CONTACT:

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

SKIN CONTACT:

Moderate Skin Irritation (after prolonged or repeated contact): signs/symptoms can include redness, swelling, itching, and dryness.

INHALATION:

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

Central Nervous System Depression: signs/symptoms can include

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

8. HEALTH HAZARD DATA (continued)

headache, dizziness, drowsiness, incoordination, slowed reaction time, slurred speech, giddiness and unconsciousness.

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

IF SWALLOWED:

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

Ingestion may cause:

Central Nervous System Depression: signs/symptoms can include headache, dizziness, drowsiness, muscular weakness, incoordination, slowed reaction time, fatigue, blurred vision, slurred speech, giddiness, tremors and convulsions.

SECTION CHANGE DATES

INGREDIENTS SECTION CHANGED SINCE April 17, 2000 ISSUE

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

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DIVISION: TELECOM SYSTEMS DIVISION
 TRADE NAME:

SCOTCHCAST EXPANDABLE SEALANT FOR 4411, 4416 AND K&B REHAB KITS
 ID NUMBER/U.P.C. :
 80-6100-8712-6 00-54007-32006-7 80-6100-9488-2 00-54007-32562-8
 80-6101-0166-1 00-54007-33065-3 80-6101-4502-3 00-54007-17083-9
 80-6101-4503-1 00-54007-17084-6 80-6110-0605-9 00-51138-70500-8
 80-6110-2112-4 00-51138-89399-6
 ISSUED: December 12, 2000
 SUPERSEDES: May 26, 2000
 DOCUMENT: 10-2416-5

1. INGREDIENT	C.A.S. NO.	PERCENT
PART A (PREPOLYMER):.....	Mixture	58.8
HIGHER OLIGOMERS OF MDI.....	9016-87-9	45 - 55
P,P'-METHYLENEBIS(PHENYL ISOCYANATE)....	101-68-8	35 - 55
1,1'-METHYLENEBIS(ISOCYANATOBENZENE)....	26447-40-5	3 - 7
SILICONE COPOLYMER.....	TradeSecret	1 - 5
PART B (POLYOL):.....	Mixture	41.2
POLYETHER POLYOL.....	25723-16-4	80 - 90
GLYCOLS, POLYPROPYLENE.....	25322-69-4	15 - 20
WATER.....	7732-18-5	1 - 5
N,N-DIMETHYLCYCLOHEXYLAMINE.....	98-94-2	0.1 - 1

TradeSecret = NJ Reg. Nos. 027586004-5045P; -5046P; -5047P

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:
 HIGHER OLIGOMERS OF MDI
 P,P'-METHYLENEBIS(PHENYL ISOCYANATE)

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

2. PHYSICAL DATA

BOILING POINT:..... N/D
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: Soluble.
SPECIFIC GRAVITY:..... PART A: 1.24. PART B: 1.03.
PERCENT VOLATILE:..... N/A
pH:..... N/A
VISCOSITY:..... PART A: ~205 cps. PART B: ~550 cps.
MELTING POINT:..... N/A

APPEARANCE AND ODOR:

PART A: Dark brown liquid. PART B: Clear liquid w/slight amine odor.

3. FIRE AND EXPLOSION HAZARD DATA

FLASH POINT:..... > 230 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: 0
UNUSUAL REACTION HAZARD: none

OSHA FIRE HAZARD CLASS: Class IIIB Combustible Liquid

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

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. 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

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

6. SUGGESTED FIRST AID

EYE CONTACT:

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

SKIN CONTACT:

Immediately flush skin with large amounts of water. Remove contaminated clothing. If irritation persists, call a physician. Wash contaminated clothing before reuse.

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 skin contact. Gloves not normally required.

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

RECOMMENDED VENTILATION:

Use with appropriate local exhaust 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.

RECOMMENDED STORAGE:

Keep out of the reach of children.

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

 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	
HIGHER OLIGOMERS OF MDI.....	NONE	NONE	NONE	NONE	
P,P'-METHYLENEBIS(PHENYL ISOCYANATE).....	0.02	PPM	CEIL	OSHA	
P,P'-METHYLENEBIS(PHENYL ISOCYANATE).....	0.005	PPM	TWA	ACGIH	
1,1'- METHYLENEBIS(ISOCYANATOBENZENE)....	0.005	PPM	TWA	ACGIH	
1,1'- METHYLENEBIS(ISOCYANATOBENZENE)....	0.02	PPM	CEIL	OSHA	
SILICONE COPOLYMER.....	NONE	NONE	NONE	NONE	
PART B (POLYOL):.....	NONE	NONE	NONE	NONE	
POLYETHER POLYOL.....	NONE	NONE	NONE	NONE	
GLYCOLS, POLYPROPYLENE.....	10	MG/M3	TWA	AIHA	
		AS PARTICULATE			
WATER.....	NONE	NONE	NONE	NONE	
N,N-DIMETHYLCYCLOHEXYLAMINE.....	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
- OSHA: Occupational Safety and Health Administration
- NONE: None Established

 8. HEALTH HAZARD DATA

EYE CONTACT:

Moderate Eye Irritation: signs/symptoms can include redness, swelling, pain, tearing, and hazy vision.

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

8. HEALTH HAZARD DATA (continued)

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.

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.

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.

SECTION CHANGE DATES

HEADING	SECTION CHANGED SINCE May 26, 2000	ISSUE
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