

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: ELECTRICAL PRODUCTS DIVISION
TRADE NAME:

QSI III 5777-MT SERIES QSI III 3 CONDUCTOR SPLICE KIT
ID NUMBER/U.P.C. :
80-6109-7135-2 00-54007-44289-9 80-6109-8095-7 - - -
80-6109-8335-7 00-54007-04251-8 80-6112-0738-4 00-54007-44289-9
ISSUED: March 27, 2000
SUPERSEDES: February 01, 2000
DOCUMENT: 08-3142-0

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:
06-4861-8
11-4627-3
06-7394-7
11-0744-0
05-4288-6
10-9735-1

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

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This material safety data sheet (MSDS) is provided as a courtesy
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 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:

SCOTCHSEAL COMPOUND 2229

ID NUMBER/U.P.C.:

80-6105-9441-0 00-54007-49702-8 80-6107-3292-9 00-54007-50336-1
 80-6109-2897-2 00-54007-42919-7 80-6109-2916-0 00-54007-42938-8

ISSUED: February 17, 1999

SUPERSEDES: February 12, 1999

DOCUMENT: 05-4288-6

1. INGREDIENT	C.A.S. NO.	PERCENT	
KAOLIN.....	1332-58-7	38.0	- 41.0
POLYBUTYLENE.....	9003-29-6	20.0	- 24.0
CALCIUM CARBONATE.....	471-34-1	6.0	- 10.0
ALIPHATIC HYDROCARBONS.....	68003-51-0	6.7	- 7.0
POLYISOBUTYLENE.....	9003-27-4	5.0	- 8.0
ISOBUTYLENE-ISOPRENE POLYMER.....	9010-85-9	5.0	- 7.0
CARBON BLACK.....	1333-86-4	2.0	- 3.0
ASPHALT.....	8052-42-4	5.0	- 8.0

The components of this product are in compliance with the chemical
 notification requirements of TSCA.

ALL COMPONENTS ARE ON THE TSCA, EINECS, AND CDSL CHEMICAL
 INVENTORIES.

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

2. PHYSICAL DATA

BOILING POINT:..... N/A
VAPOR PRESSURE:..... N/A
VAPOR DENSITY:..... N/A
EVAPORATION RATE:..... N/A
SOLUBILITY IN WATER:..... nil
SPECIFIC GRAVITY:..... ca. 1.20 Water=1 ASTM
PERCENT VOLATILE:..... nil
pH:..... N/A
VISCOSITY:..... N/A
MELTING POINT:..... N/D

APPEARANCE AND ODOR:
Black roll with release liner

3. FIRE AND EXPLOSION HAZARD DATA

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:
Not applicable

UNUSUAL FIRE AND EXPLOSION HAZARDS:
No unusual fire or explosion hazards are anticipated.

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

OSHA FIRE HAZARD CLASS: Not applicable

4. REACTIVITY DATA

STABILITY: Stable

INCOMPATIBILITY - MATERIALS/CONDITIONS TO AVOID:
Not applicable.

HAZARDOUS POLYMERIZATION: Hazardous polymerization will not occur.

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

4. REACTIVITY DATA (continued)

HAZARDOUS DECOMPOSITION PRODUCTS:
Carbon Monoxide and Carbon Dioxide.

5. ENVIRONMENTAL INFORMATION

SPILL RESPONSE:
Not applicable.

RECOMMENDED DISPOSAL:
Incinerate in an industrial or commercial facility. Dispose of waste product in a sanitary landfill.

ENVIRONMENTAL DATA:
Not applicable.

REGULATORY INFORMATION:
Volatile Organic Compounds: N/D.
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: 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.

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

7. PRECAUTIONARY INFORMATION

EYE PROTECTION:
Not applicable.

SKIN PROTECTION:
Not applicable.

RECOMMENDED VENTILATION:
Not applicable.

RESPIRATORY PROTECTION:
Not applicable.

PREVENTION OF ACCIDENTAL INGESTION:
Wash hands after handling and before eating.

RECOMMENDED STORAGE:
Keep out of the reach of children.

FIRE AND EXPLOSION AVOIDANCE:
Not applicable.

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

EXPOSURE LIMITS

INGREDIENT	VALUE	UNIT	TYPE	AUTH	SKIN*
KAOLIN.....	2	MG/M3	TWA	ACGIH	
		respirable dust			
KAOLIN.....	10	MG/M3	TWA	OSHA	
POLYBUTYLENE.....	NONE	NONE	NONE	NONE	
CALCIUM CARBONATE.....	10	MG/M3	TWA	ACGIH	
ALIPHATIC HYDROCARBONS.....	NONE	NONE	NONE	NONE	
POLYISOBUTYLENE.....	NONE	NONE	NONE	NONE	
ISOBUTYLENE-ISOPRENE POLYMER.....	NONE	NONE	NONE	NONE	
CARBON BLACK.....	3.5	MG/M3	TWA	ACGIH	
CARBON BLACK.....	3.5	MG/M3	TWA	OSHA	
ASPHALT.....	5	MG/M3	TWA	ACGIH	
		as fume			

* 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

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

EXPOSURE LIMITS (continued)

INGREDIENT	VALUE	UNIT	TYPE	AUTH	SKIN*

- NONE:	None	Established			

8. HEALTH HAZARD DATA

EYE CONTACT:

No adverse health effects are expected from eye contact.

SKIN CONTACT:

No adverse health effects are expected from skin contact.

INHALATION:

No adverse health effects are expected from inhalation exposure.

IF SWALLOWED:

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

CANCER:

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

WARNING: Contains a chemical which can cause cancer. (8052-42-4)
(IARC possible human carcinogen 2B, Calif. Proposition 65)

SECTION CHANGE DATES

HEADING SECTION CHANGED SINCE February 12, 1999 ISSUE

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DIVISION: ELECTRICAL PRODUCTS DIVISION
TRADE NAME:
P55/R COMPOUND
ID NUMBER/U.P.C.:
78-8096-4318-8 - - -
ISSUED: June 12, 2001
SUPERSEDES: March 03, 1997
DOCUMENT: 06-4861-8

1. INGREDIENT	C.A.S. NO.	PERCENT
FLUOROCARBON POLYMER.....	69991-67-9	95.0 - 100.0
AMORPHOUS SILICA.....	7631-86-9	1.0 - 5.0

INGREDIENTS LISTED ON TSCA;EINECS;CDL;AICS CHEMICAL INVENTORIES.

2. PHYSICAL DATA

BOILING POINT:..... N/D
VAPOR PRESSURE:..... < 0.01 mmHg
VAPOR DENSITY:..... N/D
EVAPORATION RATE:..... N/D
SOLUBILITY IN WATER:..... nil
SPECIFIC GRAVITY:..... ca. 1.99 Water=1
PERCENT VOLATILE:..... 0.00 %
pH:..... N/A
VISCOSITY:..... N/D
MELTING POINT:..... N/D

APPEARANCE AND ODOR:
Paste, ODORLESS, RED COLOR

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

3. FIRE AND EXPLOSION HAZARD DATA

FLASH POINT:..... N/A
FLAMMABLE LIMITS - LEL:..... N/A
FLAMMABLE LIMITS - UEL:..... N/A
AUTOIGNITION TEMPERATURE:..... N/A

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:

Not determined.

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

4. REACTIVITY DATA

STABILITY: Stable

INCOMPATIBILITY - MATERIALS/CONDITIONS TO AVOID:

Strong Acids, Strong Bases, Reactive Metals

Avoid heating above 290 degrees C.

HAZARDOUS POLYMERIZATION: Hazardous polymerization will not occur.

HAZARDOUS DECOMPOSITION PRODUCTS:

Carbon Monoxide and Carbon Dioxide, Hydrogen Fluoride, Carbonyl Fluoride.

5. ENVIRONMENTAL INFORMATION

SPILL RESPONSE:

Observe precautions from other sections. Cover with absorbent material. Collect spilled material. Place in a closed container.

RECOMMENDED DISPOSAL:

Incinerate in an industrial or commercial facility. Combustion products will include HF.

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

5. ENVIRONMENTAL INFORMATION (continued)

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.

EPCRA HAZARD CLASS:
FIRE HAZARD: No PRESSURE: No REACTIVITY: No ACUTE: No CHRONIC: No

6. SUGGESTED FIRST AID

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

SKIN CONTACT:
No need for first aid is anticipated.

INHALATION:
No need for first aid is anticipated.

IF SWALLOWED:
Drink two glasses of water. Call a physician.

7. PRECAUTIONARY INFORMATION

EYE PROTECTION:
Avoid eye contact.

SKIN PROTECTION:
None required.

RECOMMENDED VENTILATION:
Not applicable.

RESPIRATORY PROTECTION:
Avoid breathing of thermal decomposition products.

PREVENTION OF ACCIDENTAL INGESTION:
Do not eat, drink or smoke when using this product. Wash exposed
areas thoroughly with soap and water.

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

7. PRECAUTIONARY INFORMATION (continued)

RECOMMENDED STORAGE:

Store away from flammable and combustible materials.

FIRE AND EXPLOSION AVOIDANCE:

No smoking while handling this material.

HMS HAZARD RATINGS: HEALTH: 0 FLAMMABILITY: 1 REACTIVITY: 0
PERSONAL PROTECTION: B (See precautions, section 7.)

EXPOSURE LIMITS

INGREDIENT	VALUE	UNIT	TYPE	AUTH	SKIN*
FLUOROCARBON POLYMER.....	NONE	NONE	NONE	NONE	
AMORPHOUS SILICA.....	3	MG/M3	TWA	CMRG	
		AS RESPIRABLE DUST			

* 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:

- CMRG: Chemical Manufacturer Recommended Exposure Guidelines
- NONE: None Established

8. HEALTH HAZARD DATA

EYE CONTACT:

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

No adverse health effects are expected from eye contact.

SKIN CONTACT:

No adverse health effects are expected from skin contact.

INHALATION:

Health effects from inhalation are not expected unless product is heated.

Heated material may evolve toxic vapors.

IF SWALLOWED:

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

Ingestion may cause:

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

8. HEALTH HAZARD DATA (continued)

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

SECTION CHANGE DATES

FIRE AND EXPL.	SECTION CHANGED SINCE March 03, 1997	ISSUE
ENVIRONMENTAL INFO.	SECTION CHANGED SINCE March 03, 1997	ISSUE
PRECAUTIONARY INFO.	SECTION CHANGED SINCE March 03, 1997	ISSUE

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DIVISION: ELECTRICAL PRODUCTS DIVISION
 TRADE NAME:

ARMORCAST STRUCTURAL MATERIAL for 4560, 4561, 4562, ABC AND ABC-DI
 KITS

ID NUMBER/U.P.C.:

80-6112-3050-1 - - - 80-6112-3051-9 - - -
 80-6112-3052-7 - - -

ISSUED: September 05, 2001
 SUPERSEDES: March 13, 2001
 DOCUMENT: 06-7394-7

1. INGREDIENT	C.A.S. NO.	PERCENT
FIBROUS GLASS.....	65997-17-3	50.0 - 55.0
MDI-PPG PREPOLYMER.....	9048-57-1	20.0 - 30.0
DIPHENYLMETHANE DIISOCYANATE.....	26447-40-5	10.0 - 15.0
MDI HOMOPOLYMER.....	39310-05-9	5.0 - 10.0
MAGNETITE.....	1309-38-2	1.0 - 5.0
BENZOYL CHLORIDE.....	98-88-4	0.01 - 0.05

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:
 BENZOYL CHLORIDE

2. PHYSICAL DATA

BOILING POINT:..... N/A
 VAPOR PRESSURE:..... <1x10⁻⁵mmHg 77F(MDI)
 VAPOR DENSITY:..... N/A
 EVAPORATION RATE:..... N/A
 SOLUBILITY IN WATER:..... Nil
 SPECIFIC GRAVITY:..... N/D
 PERCENT VOLATILE:..... Nil
 pH:..... N/A
 VISCOSITY:..... N/A
 MELTING POINT:..... N/D

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

2. PHYSICAL DATA (continued)

APPEARANCE AND ODOR:

Black, viscous liquid-coated glass cloth, slight odor

3. FIRE AND EXPLOSION HAZARD DATA

FLASH POINT:..... ~346 F 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.

NFPA HAZARD CODES: HEALTH: 2 FIRE: 1 REACTIVITY: 0

UNUSUAL REACTION HAZARD: none

4. REACTIVITY DATA

STABILITY: Stable

INCOMPATIBILITY - MATERIALS/CONDITIONS TO AVOID:

Strong Bases.

HAZARDOUS POLYMERIZATION: Hazardous polymerization will not occur.

HAZARDOUS DECOMPOSITION PRODUCTS:

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

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

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. Clean up residue.

Wet any damaged product with water to initiate the cure.

RECOMMENDED DISPOSAL:

Dispose of completely cured (or polymerized) material in a sanitary landfill.

ENVIRONMENTAL DATA:

Not determined.

REGULATORY INFORMATION:

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

EPCRA HAZARD CLASS:

FIRE HAZARD: No PRESSURE: No REACTIVITY: Yes 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:

If signs/symptoms occur, remove person to fresh air. If signs/symptoms continue, call a physician.

IF SWALLOWED:

Drink two glasses of water. Call a physician.

7. PRECAUTIONARY INFORMATION

EYE PROTECTION:

Avoid eye contact. Wear safety glasses with side shields.

7. PRECAUTIONARY INFORMATION (continued)

SKIN PROTECTION:

Avoid prolonged or repeated skin contact. Wear appropriate gloves when handling this material.

RECOMMENDED VENTILATION:

Provide sufficient ventilation to maintain emissions below recommended exposure limits.

RESPIRATORY PROTECTION:

Avoid breathing of vapors.

PREVENTION OF ACCIDENTAL INGESTION:

Wash hands after handling and before eating.

RECOMMENDED STORAGE:

Keep out of the reach of children.

FIRE AND EXPLOSION AVOIDANCE:

Not applicable.

EXPOSURE LIMITS

INGREDIENT	VALUE	UNIT	TYPE	AUTH	SKIN*
FIBROUS GLASS.....	10	MG/M3	TWA	3M	
		AS DUST			
MDI-PPG PREPOLYMER.....	NONE	NONE	NONE	NONE	
DIPHENYLMETHANE DIISOCYANATE.....	0.005	PPM	TWA	ACGIH	
DIPHENYLMETHANE DIISOCYANATE.....	0.02	PPM	CEIL	OSHA	
MDI HOMOPOLYMER.....	NONE	NONE	NONE	NONE	
MAGNETITE.....	NONE	NONE	NONE	NONE	
BENZOYL CHLORIDE.....	1	PPM	TWA	CMRG	
BENZOYL CHLORIDE.....	1	PPM	TWA	AIHA	
		15 MINUTES TWA			
BENZOYL CHLORIDE.....	0.5	PPM	CEIL	ACGIH	

* 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
- 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

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

EXPOSURE LIMITS (continued)

INGREDIENT	VALUE	UNIT	TYPE	AUTH	SKIN*
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- NONE: None Established

8. HEALTH HAZARD DATA

EYE CONTACT:

Lacrimation: signs/symptoms can include severe stinging of the eyes and profuse tear discharge.

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

SKIN CONTACT:

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

Prolonged or repeated exposure may cause:

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

INHALATION:

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.

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

Those people with bronchial problems or with isocyanate hypersensitivity will respond to low isocyanate concentrations (at levels well below TLV of 0.02 ppm.)

IF SWALLOWED:

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

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.

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

8. HEALTH HAZARD DATA (continued)

WARNING: Contains a chemical which can cause cancer. (98-88-4) (I ARC
probable human carcinogen 2A)

SECTION CHANGE DATES

HEADING	SECTION CHANGED SINCE	ISSUE
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 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

2. PHYSICAL DATA

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

3. FIRE AND EXPLOSION HAZARD DATA

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

4. REACTIVITY DATA

STABILITY: Stable

INCOMPATIBILITY - MATERIALS/CONDITIONS TO AVOID:
Strong Oxidizing Agents, Finely divided active metals. Not
applicable.

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

4. REACTIVITY DATA (continued)

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.

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: Yes CHRONIC: Yes

6. SUGGESTED FIRST AID

EYE CONTACT:

No need for first aid is anticipated.

SKIN CONTACT:

No need for first aid is anticipated.

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

6. SUGGESTED FIRST AID (continued)

INHALATION:

No need for first aid is anticipated.

IF SWALLOWED:

No need for first aid is anticipated.

7. PRECAUTIONARY INFORMATION

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			

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

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

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.

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)

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

8. HEALTH HAZARD DATA (continued)

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.

SECTION CHANGE DATES

HEADING SECTION CHANGED SINCE September 10, 2001 ISSUE

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 DATA SHEET 3M Center
 St. Paul, Minnesota
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 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:
 SCOTCH(TM) 2228 Rubber Mastic Tape
 U.P.C. Number:
 00-54007-09656-6 00-54007-50727-7 00-54007-42918-0
 ISSUED: June 12, 2001
 SUPERSEDES: September 12, 2000
 DOCUMENT: 11-0744-0

1. INGREDIENT	C.A.S. NO.		PERCENT
Alumina Trihydrate.....	21645-51-2	48	- 58
Polyisobutylene.....	9003-27-4	18	- 28
Polybutylene.....	9003-29-6	10	- 20
Ethylene-Propylene-Ethylidenenorbornene Terpolymer.....	25038-36-2	8	- 18
Calcium Carbonate.....	471-34-1	8	- 18
Kaolin.....	1332-58-7	5	- 15
Polypropylene.....	9003-07-0	5	- 10
Carbon Black.....	1333-86-4	5	- 10
EPDM/POLYOLEFIN BLEND.....	None	3	- 8
Isobutylene-Isoprene Polymer.....	9010-85-9	4	- 8
Piperylene-2-Methyl-2-Butene Polymer....	26813-14-9	4	- 8
Solvent-refined Heavy Paraffinic Petroleum Distillates.....	64741-88-4	2	- 7
1-Hexene,polymer with 1,3- cyclopentadiene and other isomers....	68003-51-0	2	- 8
Asphalt.....	8052-42-4	2	- 4
Zinc Stearate.....	557-05-1	0.5	- 0.8

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

1. INGREDIENT	C.A.S. NO.	PERCENT	
TETRAKIS[METHYLENE(3,5-DI-TERT-BUTYL-4-HYDROXYHYDROCINNAMATE)]METHANE.....	6683-19-8	0.1	- 0.5
Calcium Silicate.....	1344-95-2	0.1	- 0.15

The components of this product are in compliance with the chemical notification requirements of TSCA. All applicable chemical ingredients in this material are listed on the European Inventory of Existing Chemical Substances (EINECS), or are exempt polymers whose monomers are listed on EINECS.

Carbon black, calcium silicate and zinc stearate are compounded into the polymeric matrix; therefore, these will not contribute to dust hazard for inhalation nor ingestion.

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:
Zinc Stearate

2. PHYSICAL DATA

BOILING POINT:..... N/A
VAPOR PRESSURE:..... N/A
VAPOR DENSITY:..... N/A
EVAPORATION RATE:..... N/A
SOLUBILITY IN WATER:..... Nil
SPECIFIC GRAVITY:..... ca. 1.1 Water=1
PERCENT VOLATILE:..... 0
pH:..... N/A
VISCOSITY:..... N/A
MELTING POINT:..... N/D

APPEARANCE AND ODOR:
Black roll with release liner

3. FIRE AND EXPLOSION HAZARD DATA

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

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

3. FIRE AND EXPLOSION HAZARD DATA (continued)

SPECIAL FIRE FIGHTING PROCEDURES:
Not applicable

UNUSUAL FIRE AND EXPLOSION HAZARDS:
Not applicable.

NFPA HAZARD CODES: HEALTH: 0 FIRE: 1 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:
Not applicable.

RECOMMENDED DISPOSAL:
Incinerate in an industrial or commercial facility in the presence of
a combustible material. Disposal alternative: 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. In the event of an uncontrolled release of this
material, the user should determine if the release qualifies as a
reportable quantity. U.S. EPA Hazardous Waste Number = None (Not
U.S. EPA Hazardous).

EPCRA HAZARD CLASS:

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

5. ENVIRONMENTAL INFORMATION (continued)

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.

7. PRECAUTIONARY INFORMATION

EYE PROTECTION:

Not applicable.

SKIN PROTECTION:

Not applicable.

RECOMMENDED VENTILATION:

Not applicable.

RESPIRATORY PROTECTION:

Not applicable.

PREVENTION OF ACCIDENTAL INGESTION:

Not applicable.

RECOMMENDED STORAGE:

Not applicable.

FIRE AND EXPLOSION AVOIDANCE:

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

HMIS HAZARD RATINGS: HEALTH: 0 FLAMMABILITY: 1 REACTIVITY: 0
PERSONAL PROTECTION: A (See precautions, section 7.)

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

 7. PRECAUTIONARY INFORMATION (continued)

EXPOSURE LIMITS

INGREDIENT	VALUE	UNIT	TYPE	AUTH	SKIN*
Alumina Trihydrate.....	NONE	NONE	NONE	NONE	
Polyisobutylene.....	NONE	NONE	NONE	NONE	
Polybutylene.....	NONE	NONE	NONE	NONE	
Ethylene-Propylene- Ethylidenenorbornene Terpolymer....	NONE	NONE	NONE	NONE	
Calcium Carbonate.....	10	MG/M3	TWA	ACGIH	
Kaolin.....	2	MG/M3	TWA	ACGIH	
		RESPIRABLE			
Kaolin.....	10	MG/M3	TWA	OSHA	
		AS DUST			
		OSHA VACATED PEL			
Kaolin.....	15	MG/M3	TWA	OSHA	
		AS TOTAL DUST			
Kaolin.....	5	MG/M3	TWA	OSHA	
		RESPIRABLE			
Polypropylene.....	10	MG/M3	TWA	CMRG	
		AS TOTAL DUST			
Polypropylene.....	5	MG/M3	TWA	CMRG	
		AS RESPIRABLE DUST			
Carbon Black.....	3.5	MG/M3	TWA	ACGIH	
Carbon Black.....	3.5	MG/M3	TWA	OSHA	
Carbon Black.....	0.5	MG/M3	TWA	CMRG	
EPDM/POLYOLEFIN BLEND.....	NONE	NONE	NONE	NONE	
Isobutylene-Isoprene Polymer.....	NONE	NONE	NONE	NONE	
Piperylene-2-Methyl-2-Butene Polymer.....	NONE	NONE	NONE	NONE	
Solvent-refined Heavy Paraffinic Petroleum Distillates.....	5	MG/M3	TWA	CMRG	
1-Hexene,polymer with 1,3- cyclopentadiene and other isomers..	NONE	NONE	NONE	NONE	
Asphalt.....	0.5	MG/M3	TWA	ACGIH	
		as fume			
Zinc Stearate.....	10	MG/M3	TWA	OSHA	
		AS DUST			
		OSHA VACATED PEL			
Zinc Stearate.....	10	MG/M3	TWA	ACGIH	
Zinc Stearate.....	15	MG/M3	TWA	OSHA	
		AS TOTAL DUST			
Zinc Stearate.....	5	MG/M3	TWA	OSHA	
		RESPIRABLE			
TETRAKIS[METHYLENE(3,5-DI-TERT- BUTYL-4- HYDROXYHYDROCINNAMATE)]METHANE.....	NONE	NONE	NONE	NONE	
Calcium Silicate.....	10	MG/M3	TWA	ACGIH	
		AS TOTAL DUST			
Calcium Silicate.....	15	MG/M3	TWA	OSHA	

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

EXPOSURE LIMITS (continued)

INGREDIENT	VALUE	UNIT	TYPE	AUTH	SKIN*
Calcium Silicate.....	5	MG/M3	TWA	OSHA	
		AS TOTAL DUST RESPIRABLE			

* 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

8. HEALTH HAZARD DATA

EYE CONTACT:

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

SKIN CONTACT:

Product is not expected to be irritating to the skin.

INHALATION:

No adverse health effects are expected from inhalation exposure.

IF SWALLOWED:

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

No adverse health effects are expected from swallowing.

CANCER:

WARNING: Contains a chemical which can cause cancer.
(1333-86-4,8052-42-4) (IARC possible human carcinogen 2B)

OTHER HEALTH HAZARD INFORMATION:

Exposure to this material in normal storage and handling has not been reported to cause significant adverse health effects. However, under normal processing conditions, e.g. grinding or heating, this product may release fumes and vapors of variable composition based on specific process conditions. These process releases may produce irritation or any of the health effects listed above when the

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

8. HEALTH HAZARD DATA (continued)

emissions are present at elevated concentrations. Use with appropriate local exhaust ventilation.

SECTION CHANGE DATES

FIRE AND EXPL. SECTION CHANGED SINCE September 12, 2000 ISSUE
ENVIRONMENTAL INFO. SECTION CHANGED SINCE September 12, 2000 ISSUE
PRECAUTIONARY INFO. SECTION CHANGED SINCE September 12, 2000 ISSUE

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SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: CC-2 PREP KIT (CABLE CLEANER)
MANUFACTURER: 3M
DIVISION: Electrical Products Division

ADDRESS: 3M Center
 St. Paul, MN 55144-1000

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

Issue Date: 10/26/2003
Supersedes Date: 06/19/2002

Document Group: 11-4627-3

Product Use:

Specific Use: SOLVENT SOAKED RAGS FOR CABLE CLEANING

SECTION 2: INGREDIENTS

<u>Ingredient</u>	<u>C.A.S. No.</u>	<u>% by Wt</u>
PETROLEUM DISTILLATES	64771-72-8	80 - 95
D-LIMONENE	5989-27-5	5 - 20

SECTION 3: HAZARDS IDENTIFICATION

3.1 EMERGENCY OVERVIEW

Odor, Color, Grade: clear, citrus-like odor

General Physical Form: Liquid

Immediate health, physical, and environmental hazards: Closed containers exposed to heat from fire may build pressure and explode. Vapors may travel long distances along the ground or floor to an ignition source and flash back. Combustible liquid and vapor. Flammable liquid and vapor. May cause allergic skin reaction. May cause target organ effects.

3.2 POTENTIAL HEALTH EFFECTS

Eye Contact:

Mild Eye Irritation: Signs/symptoms may include redness, pain, and tearing.

Skin Contact:

Moderate Skin Irritation: Signs/symptoms may include localized redness, swelling, itching, and dryness.

Allergic Skin Reaction (non-photo induced): Signs/symptoms may include redness, swelling, blistering, and itching.

Inhalation:

Upper Respiratory Tract Irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

Ingestion:

Gastrointestinal Irritation: Signs/symptoms may include abdominal pain, nausea, diarrhea and vomiting.

Chemical (Aspiration) Pneumonitis: Signs/symptoms may include coughing, gasping, choking, burning of the mouth, difficulty breathing, bluish colored skin (cyanosis), and may be fatal.

Target Organ Effects:

Central Nervous System (CNS) Depression: Signs/symptoms may include headache, dizziness, drowsiness, incoordination, nausea, slowed reaction time, slurred speech, giddiness, and unconsciousness.

3.3 POTENTIAL ENVIRONMENTAL EFFECTS

VOC Data: 740 grams/liter maximum VOC (less water and exempt compounds). U.S. EPA Waste Number: None. 5 Day Biological Oxygen Demand (BOD-5) = 77,000 mg/L. Chemical Oxygen Demand (COD) = 290,000 mg/L.

SECTION 4: FIRST AID MEASURES

4.1 FIRST AID PROCEDURES

The following first aid recommendations are based on an assumption that appropriate personal and industrial hygiene practices are followed.

Eye Contact: Flush eyes with large amounts of water. If signs/symptoms persist, get medical attention.

Skin Contact: Remove contaminated clothing and shoes. Immediately flush skin with large amounts of water. Get medical attention. Wash contaminated clothing and clean shoes before reuse.

Inhalation: Remove person to fresh air. If signs/symptoms develop, get medical attention.

If Swallowed: Do not induce vomiting. Give victim two glasses of water. Never give anything by mouth to an unconscious person. Get immediate medical attention.

SECTION 5: FIRE FIGHTING MEASURES

5.1 FLAMMABLE PROPERTIES

Autoignition temperature	<i>No Data Available</i>
Flash Point	≥ 144 °F [<i>Test Method:</i> Closed Cup]
Flash Point	144 °F [<i>Test Method:</i> Closed Cup] [<i>Details:</i> MITS data]
Flash Point	≥ 165 °F [<i>Test Method:</i> Open Cup]
Flammable Limits - LEL	<i>No Data Available</i>
Flammable Limits - UEL	<i>No Data Available</i>
OSHA Flammability Classification:	Class IIIA Combustible Liquid

5.2 EXTINGUISHING MEDIA

Use fire extinguishers with class B extinguishing agents (e.g., dry chemical, carbon dioxide).

5.3 PROTECTION OF FIRE FIGHTERS

Special Fire Fighting Procedures: Water may not effectively extinguish fire; however, it should be used to keep fire-exposed containers and surfaces cool and prevent explosive rupture. 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: Closed containers exposed to heat from fire may build pressure and explode. Vapors may travel long distances along the ground or floor to an ignition source and flash back. Not applicable. Combustible liquid and vapor. Flammable liquid and vapor.

Note: See STABILITY AND REACTIVITY (SECTION 10) for hazardous combustion and thermal decomposition information.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Accidental Release Measures: Evacuate unprotected and untrained personnel from hazard area. The spill should be cleaned up by qualified personnel. Ventilate the area with fresh air. For large spill, or spills in confined spaces, provide mechanical ventilation to disperse or exhaust vapors, in accordance with good industrial hygiene practice. Warning! A motor could be an ignition source and could cause flammable gases or vapors in the spill area to burn or explode. Contain spill. For larger spills, cover drains and build dikes to prevent entry into sewer systems or bodies of water. Working from around the edges of the spill inward, cover with bentonite, vermiculite, or commercially available inorganic absorbent material. Mix in sufficient absorbent until it appears dry. Collect as much of the spilled material as possible. Place in a metal container approved for transportation by appropriate authorities. Place in a closed container approved for transportation by appropriate authorities. Seal the container.

In the event of a release of this material, the user should determine if the release qualifies as reportable according to

local, state, and federal regulations.

SECTION 7: HANDLING AND STORAGE

7.1 HANDLING

Avoid eye contact with vapors, mists, or spray. Avoid breathing of vapors, mists or spray. Do not eat, drink or smoke when using this product. Wash exposed areas thoroughly with soap and water. Keep away from heat, sparks, open flame, pilot lights and other sources of ignition. No smoking while handling this material. Avoid contact with oxidizing agents.

7.2 STORAGE

Store away from acids. Store away from heat. Store out of direct sunlight. Store away from oxidizing agents. Keep container in well-ventilated area.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 ENGINEERING CONTROLS

Use with appropriate local exhaust ventilation. Provide appropriate local exhaust ventilation on open containers. Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below Occupational Exposure Limits and/or control mist, vapor, or spray. If ventilation is not adequate, use respiratory protection equipment.

8.2 PERSONAL PROTECTIVE EQUIPMENT (PPE)

8.2.1 Eye/Face Protection

Avoid eye contact with vapors, mists, or spray. Avoid eye contact.
The following eye protection(s) are recommended: Indirect Vented Goggles.

8.2.2 Skin Protection

Avoid skin contact.

Select and use gloves and/or protective clothing to prevent skin contact based on the results of an exposure assessment. Consult with your glove and/or protective clothing manufacturer for selection of appropriate compatible materials.

Gloves made from the following material(s) are recommended: Fluoroelastomer (Viton), Nitrile Rubber, Polyethylene.

8.2.3 Respiratory Protection

Avoid breathing of vapors, mists or spray.

Select one of the following NIOSH approved respirators based on airborne concentration of contaminants and in accordance with OSHA regulations: Half facepiece or fullface air-purifying respirator with organic vapor cartridges. Consult the current 3M Respiratory Selection Guide for additional information or call 1-800-243-4630 for 3M technical assistance.

8.2.4 Prevention of Swallowing

Do not eat, drink or smoke when using this product. Wash exposed areas thoroughly with soap and water.

8.3 EXPOSURE GUIDELINES

<u>Ingredient</u>	<u>Authority</u>	<u>Type</u>	<u>Limit</u>	<u>Additional Information</u>
PETROLEUM DISTILLATES	CMRG	TWA	300 ppm	

SOURCE OF EXPOSURE LIMIT DATA:

ACGIH: American Conference of Governmental Industrial Hygienists

CMRG: Chemical Manufacturer Recommended Guideline
 OSHA: Occupational Safety and Health Administration
 AIHA: American Industrial Hygiene Association Workplace Environmental Exposure Level (WEEL)

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Odor, Color, Grade:	clear, citrus-like odor
General Physical Form:	Liquid
Autoignition temperature	<i>No Data Available</i>
Flash Point	>=144 °F [<i>Test Method: Closed Cup</i>]
Flash Point	144 °F [<i>Test Method: Closed Cup</i>] [<i>Details: MITS data</i>]
Flash Point	>=165 °F [<i>Test Method: Open Cup</i>]
Flammable Limits - LEL	<i>No Data Available</i>
Flammable Limits - UEL	<i>No Data Available</i>
Boiling point	380.00 - 480.00 °F
Boiling point	>=95 °F [<i>Details: MITS data</i>]
Density	0.76 g/ml
Vapor Density	>=1.00 [<i>Ref Std: AIR=1</i>]
Vapor Pressure	<=1.0000 mmHg [<i>Details: CONDITIONS: Less than 1 mmHg at 25 C</i>]
Specific Gravity	0.76 [<i>Details: MITS data</i>]
pH	7.0
Melting point	<i>No Data Available</i>
Evaporation rate	<i>Not Applicable</i>
Volatile Organic Compounds	Approximately 740 g/l
VOC Less H2O & Exempt Solvents	<i>No Data Available</i>
Viscosity	<i>No Data Available</i>

SECTION 10: STABILITY AND REACTIVITY

Stability: Stable.

Materials and Conditions to Avoid: Strong oxidizing agents

Hazardous Polymerization: Hazardous polymerization will not occur.

Hazardous Decomposition or By-Products

<u>Substance</u>	<u>Condition</u>
Carbon monoxide	Not Specified
Carbon dioxide	Not Specified

SECTION 11: TOXICOLOGICAL INFORMATION

Please contact the address listed on the first page of the MSDS for Toxicological Information on this material and/or its components.

SECTION 12: ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION

Not determined.

CHEMICAL FATE INFORMATION

Not determined.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal Method: Incinerate in an industrial or commercial facility. As a disposal alternative, dispose of waste product in a facility permitted to accept chemical waste.

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

SECTION 14: TRANSPORT INFORMATION

ID Number(s):

78-8061-7605-9, 80-6105-9299-2, 80-6112-0013-2

Please contact the emergency numbers listed on the first page of the MSDS for Transportation Information for this material.

SECTION 15: REGULATORY INFORMATION

US FEDERAL REGULATIONS

Contact 3M for more information.

311/312 Hazard Categories:

Fire Hazard - Yes Pressure Hazard - No Reactivity Hazard - No Immediate Hazard - Yes Delayed Hazard - Yes

STATE REGULATIONS

Contact 3M for more information.

CHEMICAL INVENTORIES

The components of this product are listed on the Canadian Domestic Substances List.

All applicable chemical ingredients in this material are listed on the European Inventory of Existing Chemical Substances (EINECS), or are exempt polymers whose monomers are listed on EINECS.

The components of this product are in compliance with the chemical notification requirements of TSCA.

Contact 3M for more information.

Additional Information: All components are on the TSCA; EINECS; and CDSL Inventories.

INTERNATIONAL REGULATIONS

Contact 3M for more information.

This MSDS has been prepared to meet the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200.

SECTION 16: OTHER INFORMATION

NFPA Hazard Classification

Health: 2 **Flammability:** 2 **Reactivity:** 0 **Special Hazards:** None

National Fire Protection Association (NFPA) hazard ratings are designed for use by emergency response personnel to address the hazards that are presented by short-term, acute exposure to a material under conditions of fire, spill, or similar emergencies. Hazard ratings are primarily based on the inherent physical and toxic properties of the material but also include the toxic properties of combustion or decomposition products that are known to be generated in significant quantities.

HMIS Hazard Classification

Health: 2 **Flammability:** 2 **Reactivity:** 0 **Protection:** B

Hazardous Material Identification System (HMIS(r)) hazard ratings are designed to inform employees of chemical hazards in the workplace. These ratings are based on the inherent properties of the material under expected conditions of normal use and are not intended for use in emergency situations. HMIS(r) ratings are to be used with a fully implemented HMIS(r) program. HMIS(r) is a registered mark of the National Paint and Coatings Association (NPCA).

Revision Changes:

Copyright was modified.

Section 6: Release measures information was modified.

Section 7: Handling information was modified.

Section 7: Storage information was modified.

Section 8: Engineering controls information was modified.

Section 16: HMIS explanation was modified.

Section 16: NFPA explanation was modified.

Section 8: Exposure guidelines ingredient information was modified.

Section 12: Ecotoxicological phrase was added.

Section 12: Chemical Fate phrase was added.

Section 12: Ecotoxicological ecotox article information was deleted.

Section 12: Ecotoxicological ecofate information was deleted.

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