SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: CC-3 CABLE CLEANING PADS (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: 01/31/2002
Supercedes Date: 01/31/2002

Document Group: 11-4628-1

Product Use: Specific Use: SOLVENT SOAKED PADS FOR CLEANING CABLE

SECTION 2: INGREDIENTS

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>C.A.S. No.</th>
<th>% by Wt</th>
</tr>
</thead>
<tbody>
<tr>
<td>PETROLEUM DISTILLATES</td>
<td>64771-72-8</td>
<td>80 - 95</td>
</tr>
<tr>
<td>D-LIMONENE</td>
<td>5989-27-5</td>
<td>10 - 20</td>
</tr>
</tbody>
</table>

SECTION 3: HAZARDS IDENTIFICATION

3.1 EMERGENCY OVERVIEW

Specific Physical Form: Liquid in bag with cloth pads
Odor, Color, Grade: citrus-like odor

General Physical Form: Liquid Lint-free cloths soaked with 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. Can cause eye irritation. Causes skin irritation. Can cause allergic skin reaction. Causes irritation if ingested. Causes irritation if inhaled. Can cause adverse target organ (system) effects.
.2 POTENTIAL HEALTH EFFECTS

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

Skin Contact:
Moderate Skin Irritation: Signs/symptoms can include localized redness, swelling, itching, and dryness.
Allergic Skin Reaction (non-photo induced): Signs/symptoms can include redness, swelling, blistering, and itching.

Inhalation:
Upper Respiratory Tract Irritation/Corrosion: Signs/symptoms can include cough, sneezing, nasal discharge, hoarseness, wheezing, breathing difficulty, nose and throat pain, coughing up blood, and nonrespiratory effects such as painful and watery eyes.
Can be absorbed following inhalation and cause adverse systemic health effects.

Ingestion:
Gastrointestinal Irritation/Corrosion: Signs/symptoms can include mouth and abdominal pain, nausea, vomiting and diarrhea; ulceration of the G.I. tract; blood in feces and/or vomitus.
Chemical (Aspiration) Pneumonitis: Signs/symptoms can include coughing, gasping, choking, burning of the mouth, difficulty breathing, bluish colored skin (cyanosis), and possibly death.
Can be absorbed following ingestion and cause adverse systemic health effects.

Other Health Effects:
Central Nervous System (CNS) Depression: Signs/symptoms can 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

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 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

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Autoignition temperature</td>
<td>No Data Available</td>
</tr>
<tr>
<td>Flash Point - Closed Cup</td>
<td>165 °F</td>
</tr>
<tr>
<td>Flash Point - Open Cup</td>
<td>170 °F</td>
</tr>
<tr>
<td>Flammable Limits - LEL</td>
<td>No Data Available</td>
</tr>
<tr>
<td>Flammable Limits - UEL</td>
<td>No Data Available</td>
</tr>
<tr>
<td>OSHA Flammability Classification</td>
<td>Class IIIA Combustible Liquid</td>
</tr>
</tbody>
</table>

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 closed container approved for transportation by appropriate authorities. Place in a metal 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. For industrial or professional use only. Keep away from heat, sparks, open flame, 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 flammable and combustible materials. 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.

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
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. Avoid skin contact.

Select and use gloves and/or protective clothing to prevent skin contact based on the results 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

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Authority</th>
<th>Type</th>
<th>Limit</th>
<th>Additional Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>D-LIMONENE</td>
<td>AIHA</td>
<td>TWA</td>
<td>30 ppm</td>
<td></td>
</tr>
<tr>
<td>PETROLEUM DISTILLATES</td>
<td>CMRG</td>
<td>TWA</td>
<td>300 ppm</td>
<td></td>
</tr>
</tbody>
</table>

*SOURCE OF EXPOSURE LIMIT DATA:
ACGIH: American Conference of Governmental Industrial Hygienists
SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

- **Specific Physical Form:** Liquid in bag with cloth pads
- **Odor, Color, Grade:** citrus-like odor
- **General Physical Form:** Liquid Lint-free cloths soaked with liquid
- **Autoignition temperature:**
  - Flash Point: 165 °F [Test Method: Open Cup]
  - Flash Point: 144 °F [Test Method: Closed Cup]
- **Flammable Limits - LEL:** No Data Available
- **Flammable Limits - UEL:** No Data Available
- **Boiling point:** 380.00 - 480.00 °F
- **Vapor Density:** >=1.00 [Ref Std: AIR=1] [Details: CONDITIONS: Greater than 1 (Air=1)]
- **Vapor Pressure:** <=1.0000 mmHg [Details: CONDITIONS: Less than 1 mmHg at 25 °C]
- **Specific Gravity:** 0.76 [Details: MITS data]
- **pH:** 7.0
- **Melting point:** No Data Available
- **Evaporation rate:** No Data Available
- **Volatile Organic Compounds:** Approximately 740 g/l
- **VOC Less H2O & Exempt Solvents:** No Data Available
- **Viscosity:** No Data Available

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**

<table>
<thead>
<tr>
<th>Substance</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbon monoxide</td>
<td>Not Specified</td>
</tr>
<tr>
<td>Carbon dioxide</td>
<td>Not Specified</td>
</tr>
</tbody>
</table>

SECTION 11: TOXICOLOGICAL INFORMATION
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):
80-6105-9300-8

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.
INVENTORIES

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.

US LABEL INFORMATION

Moderate skin irritant. May cause sensitization by skin contact. Can cause central nervous system depression. Mild eye irritant. Irritating to upper respiratory system.

PRECAUTIONS: See MSDS for suggested first aid and precautions.

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 Agency Hazard Codes are designed for use by firefighters, sheriffs, or other emergency response teams who are concerned with the hazards of burning or exploding materials. These NFPA codes are not intended to address the hazards of this product other than in a fire situation.

HMIS Hazard Classification
Health: 2 Flammability: 2 Reactivity: 0 Protection: B

HMIS codes are intended for use in everyday workplace settings to provide a rapid indication of the occupational hazards associated with chemicals used in the workplace.

Revision Changes: Not Applicable

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Material Safety Data Sheet

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SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: CC-3 CABLE CLEANING PADS (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: 01/31/2002
Supersedes Date: 01/31/2002

Product Use:
Specific Use: SOLVENT SOAKED PADS FOR CLEANING CABLE

SECTION 2: INGREDIENTS

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<tr>
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<td>D-LIMONENE</td>
<td>5989-27-5</td>
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SECTION 3: HAZARDS IDENTIFICATION

3.1 EMERGENCY OVERVIEW

Specific Physical Form: Liquid in bag with cloth pads
Odor, Color, Grade: citrus-like odor
General Physical Form: Liquid Lint-free cloths soaked with 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. Can cause eye irritation. Causes skin irritation. Can cause allergic skin reaction. Causes irritation if ingested. Causes irritation if inhaled. Can cause adverse target organ (system) effects.
3.2 POTENTIAL HEALTH EFFECTS

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

Skin Contact:
Moderate Skin Irritation: Signs/symptoms can include localized redness, swelling, itching, and dryness.
Allergic Skin Reaction (non-photo induced): Signs/symptoms can include redness, swelling, blistering, and itching.

Inhalation:
Upper Respiratory Tract Irritation/Corrosion: Signs/symptoms can include cough, sneezing, nasal discharge, hoarseness, wheezing, breathing difficulty, nose and throat pain, coughing up blood, and nonrespiratory effects such as painful and watery eyes.
Can be absorbed following inhalation and cause adverse systemic health effects.

Ingestion:
Gastrointestinal Irritation/Corrosion: Signs/symptoms can include mouth and abdominal pain, nausea, vomiting and diarrhea; ulceration of the G.I. tract; blood in feces and/or vomitus.
Chemical (Aspiration) Pneumonitis: Signs/symptoms can include coughing, gasping, choking, burning of the mouth, difficulty breathing, bluish colored skin (cyanosis), and possibly death.
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Other Health Effects:
Central Nervous System (CNS) Depression: Signs/symptoms can 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

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 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

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Autoignition temperature</td>
<td>No Data Available</td>
</tr>
<tr>
<td>Flash Point</td>
<td>165 °F [Test Method: Open Cup]</td>
</tr>
<tr>
<td>Flash Point</td>
<td>144 °F [Test Method: Closed Cup]</td>
</tr>
<tr>
<td>Flammable Limits - LEL</td>
<td>No Data Available</td>
</tr>
<tr>
<td>Flammable Limits - UEL</td>
<td>No Data Available</td>
</tr>
<tr>
<td>OSHA Flammability Classification</td>
<td>Class IIIA Combustible Liquid</td>
</tr>
</tbody>
</table>

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 closed container approved for transportation by appropriate authorities. Place in a metal 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. For industrial or professional use only. Keep away from heat, sparks, open flame, 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 flammable and combustible materials. 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.

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
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. Avoid skin contact.

Select and use gloves and/or protective clothing to prevent skin contact based on the results 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

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Authority</th>
<th>Type</th>
<th>Limit</th>
<th>Additional Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>D-LIMONENE</td>
<td>AIHA</td>
<td>TWA</td>
<td>30 ppm</td>
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<td>PETROLEUM DISTILLATES</td>
<td>CMRG</td>
<td>TWA</td>
<td>300 ppm</td>
<td></td>
</tr>
</tbody>
</table>

SOURCE OF EXPOSURE LIMIT DATA:
ACGIH: American Conference of Governmental Industrial Hygienists
SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Specific Physical Form: Liquid in bag with cloth pads
Odor, Color, Grade: citrus-like odor
General Physical Form: Liquid Lint-free cloths soaked with liquid
Autoignition temperature
Flash Point 165 °F [Test Method: Open Cup]
Flash Point 144 °F [Test Method: Closed Cup]
Flammable Limits - LEL No Data Available
Flammable Limits - UEL No Data Available
Boiling point 380.00 - 480.00 °F

Vapor Density >=1.00 [Ref Std: AIR=1] [Details: CONDITIONS: Greater than 1 (Air=1)]
Vapor Pressure <=1.0000 mmHg [Details: CONDITIONS: Less than 1 mmHg at 25 C]
Specific Gravity 0.76 [Details: MITS data]
pH 7.0
Melting point No Data Available

Evaporation rate No Data Available
Volatile Organic Compounds Approximately 740 g/l
VOC Less H2O & Exempt Solvents No Data Available
Viscosity No Data Available

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

<table>
<thead>
<tr>
<th>Substance</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbon monoxide</td>
<td>Not Specified</td>
</tr>
<tr>
<td>Carbon dioxide</td>
<td>Not Specified</td>
</tr>
</tbody>
</table>

SECTION 11: TOXICOLOGICAL INFORMATION
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):
80-6105-9300-8

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.
INVENTORIES

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.

US LABEL INFORMATION

Moderate skin irritant. May cause sensitization by skin contact. Can cause central nervous system depression. Mild eye irritant. Irritating to upper respiratory system.

PRECAUTIONS: See MSDS for suggested first aid and precautions.

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 Agency Hazard Codes are designed for use by firefighters, sheriffs, or other emergency response teams who are concerned with the hazards of burning or exploding materials. These NFPA codes are not intended to address the hazards of this product other than in a fire situation.

HMIS Hazard Classification

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

HMIS codes are intended for use in everyday workplace settings to provide a rapid indication of the occupational hazards associated with chemicals used in the workplace.

Revision Changes: Not Applicable

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Material Safety Data Sheet

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SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: CC-3 CABLE CLEANING PADS (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: 01/31/2002
Supercedes Date: 01/31/2002
Document Group: 11-4628-1

Product Use:
Specific Use: SOLVENT SOAKED PADS FOR CLEANING CABLE

SECTION 2: INGREDIENTS

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>C.A.S. No.</th>
<th>% by Wt</th>
</tr>
</thead>
<tbody>
<tr>
<td>PETROLEUM DISTILLATES</td>
<td>64771-72-8</td>
<td>80 - 95</td>
</tr>
<tr>
<td>D-LIMONENE</td>
<td>5989-27-5</td>
<td>10 - 20</td>
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</tbody>
</table>

SECTION 3: HAZARDS IDENTIFICATION

3.1 EMERGENCY OVERVIEW

Specific Physical Form: Liquid in bag with cloth pads
Odor, Color, Grade: citrus-like odor
General Physical Form: Liquid Lint-free cloths soaked with 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. Can cause eye irritation. Causes skin irritation. Can cause allergic skin reaction. Causes irritation if ingested. Causes irritation if inhaled. Can cause adverse target organ (system) effects.
3.2 POTENTIAL HEALTH EFFECTS

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

Skin Contact:
Moderate Skin Irritation: Signs/symptoms can include localized redness, swelling, itching, and dryness.
Allergic Skin Reaction (non-photo induced): Signs/symptoms can include redness, swelling, blistering, and itching.

Inhalation:
Upper Respiratory Tract Irritation/Corrosion: Signs/symptoms can include cough, sneezing, nasal discharge, hoarseness, wheezing, breathing difficulty, nose and throat pain, coughing up blood, and nonrespiratory effects such as painful and watery eyes.
Can be absorbed following inhalation and cause adverse systemic health effects.

Ingestion:
Gastrointestinal Irritation/Corrosion: Signs/symptoms can include mouth and abdominal pain, nausea, vomiting and diarrhea; ulceration of the G.I. tract; blood in feces and/or vomitus.
Chemical (Aspiration) Pneumonitis: Signs/symptoms can include coughing, gasping, choking, burning of the mouth, difficulty breathing, bluish colored skin (cyanosis), and possibly death.
Can be absorbed following ingestion and cause adverse systemic health effects.

Other Health Effects:
Central Nervous System (CNS) Depression: Signs/symptoms can 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

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 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

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Autoignition temperature</td>
<td>No Data Available</td>
</tr>
<tr>
<td>Flash Point</td>
<td>165°F [Test Method: Open Cup]</td>
</tr>
<tr>
<td>Flash Point</td>
<td>144°F [Test Method: Closed Cup]</td>
</tr>
<tr>
<td>Flammable Limits - LEL</td>
<td>No Data Available</td>
</tr>
<tr>
<td>Flammable Limits - UEL</td>
<td>No Data Available</td>
</tr>
<tr>
<td>OSHA Flammability Classification</td>
<td>Class IIIA Combustible Liquid</td>
</tr>
</tbody>
</table>

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 closed container approved for transportation by appropriate authorities. Place in a metal container approved for transportation by appropriate authorities. Seal the container.
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. For industrial or professional use only. Keep away from heat, sparks, open flame, 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 flammable and combustible materials. 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.

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
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. Avoid skin contact. Select and use gloves and/or protective clothing to prevent skin contact based on the results 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

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Authority</th>
<th>Type</th>
<th>Limit</th>
<th>Additional Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>D-LIMONENE</td>
<td>AIHA</td>
<td>TWA</td>
<td>30 ppm</td>
<td></td>
</tr>
<tr>
<td>PETROLEUM DISTILLATES</td>
<td>CMRG</td>
<td>TWA</td>
<td>300 ppm</td>
<td></td>
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SOURCE OF EXPOSURE LIMIT DATA:
ACGIH: American Conference of Governmental Industrial Hygienists
SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Specific Physical Form: Liquid in bag with cloth pads
Odor, Color, Grade: citrus-like odor
General Physical Form: Liquid Lint-free cloths soaked with liquid
Autoignition temperature
Flash Point 165 °F [Test Method: Open Cup]
Flash Point 144 °F [Test Method: Closed Cup]
Flammable Limits - LEL No Data Available
Flammable Limits - UEL No Data Available
Boiling point 380.00 - 480.00 °F
Vapor Density >=1.00 [Ref Std: AIR=1] [Details: CONDITIONS: Greater than 1 (Air=1)]
Vapor Pressure <=1.0000 mmHg [Details: CONDITIONS: Less than 1 mmHg at 25 C]
Specific Gravity 0.76 [Details: MITS data]
pH 7.0
Melting point No Data Available
Evaporation rate No Data Available
Volatile Organic Compounds Approximately 740 g/l
VOC Less H2O & Exempt Solvents No Data Available
Viscosity No Data Available

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

<table>
<thead>
<tr>
<th>Substance</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbon monoxide</td>
<td>Not Specified</td>
</tr>
<tr>
<td>Carbon dioxide</td>
<td>Not Specified</td>
</tr>
</tbody>
</table>
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):
80-6105-9300-8

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.
INVENTORIES

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.

US LABEL INFORMATION

Moderate skin irritant. May cause sensitization by skin contact. Can cause central nervous system depression. Mild eye irritant. Irritating to upper respiratory system.

PRECAUTIONS: See MSDS for suggested first aid and precautions.

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 Agency Hazard Codes are designed for use by firefighters, sheriffs, or other emergency response teams who are concerned with the hazards of burning or exploding materials. These NFPA codes are not intended to address the hazards of this product other than in a fire situation.

HMIS Hazard Classification
Health: 2 Flammability: 2 Reactivity: 0 Protection: B
HMIS codes are intended for use in everyday workplace settings to provide a rapid indication of the occupational hazards associated with chemicals used in the workplace.

Revision Changes: Not Applicable

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