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3M MATERIAL SAFETY DATA SHEET 8001 CLEANER FOR STATIC CONTROL MATE/08/2003



Material Safety Data Sheet

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SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: 8001 CLEANER FOR STATIC CONTROL MATS

MANUFACTURER: 3M

DIVISION: Electronic Handling & Protection Div

ADDRESS: 3M Center

St. Paul, MN 55144-1000

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

Issue Date: 06/08/2003 Supercedes Date: 06/04/2003

Document Group: 11-4715-6

Product Use:

Specific Use: STATIC CONTROL SURFACE CLEANER

SECTION 2: INGREDIENTS

| <u>Ingredien</u> t | C.A.S. No. | % by Wt |
|--------------------------------|------------|-----------|
| WATER | 7732-18-5 | > 90 |
| 2-BUTOXYETHANOL | 111-76-2 | 3 - 7 |
| ETHANOLAMINE | 141-43-5 | 1 - 5 |
| ETHOXYLATED ALCOHOLS | 68439-45-2 | 0.5 - 1.5 |
| ETHOXYLATED SECONDARY ALCOHOLS | 84133-50-6 | 0.5 - 1.5 |
| POTASSIUM HYDROXIDE | 1310-58-3 | <1 |

SECTION 3: HAZARDS IDENTIFICATION

3.1 EMERGENCY OVERVIEW

Odor, Color, Gradexlear, essentially colorless; mild solvent odor General Physical Form:Liquid

Immediate health, physical, and environmental hazards:

May cause target organ effects.

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3.2 POTENTIAL HEALTH EFFECTS

Eve Contact:

Moderate Eye Irritation: Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision.

Skin Contact:

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

Inhalation:

May be absorbed following inhalation and cause target organ effects.

Single exposure, above recommended guidelines, may cause:

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

Ingestion:

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

Ingestion may cause:

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

Target Organ Effects:

Single exposure, above recommended guidelines, may cause:

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

A conservative, screening level assessment of this product indicates that its use and proper disposal are likely to present a low environmental risk. Potential use and misuse are unlikely to cause components to enter the environment in quantities or by routes that could cause adverse environmental impacts. The components labeled "readily biodegradable" are expected to fully degrade in wastewater treatment and in most aerobic water or soil environments. This product is estimated to be harmful to aquatic organisms

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(10 mg/L < Lowest LC50, BC50, or IC50 < or = 100 mg/L). The estimate assumes no synergistic, antagonistic or nonadditive effects. Product toxicity was estimated using the following equation: (1/Product LC50, EC50, or IC50) = SUM (fi/li) from i = 1 to i = n for fi = fraction of component i in product, li = lowest LC50, EC50, IC50 of component i, n = number of components in product. The potential of all of the components to rapidly biodegrade means that toxicity is likely to disappear rapidly in aerobic environments with conditions that favor biodegradation. The components labeled "Log Kow <3" have measured or calculated log Kow values <3 indicating they are unlikely to bioconcentrate to high concentrations in aquatic organisms by partitioning into lipid tissues. The components labeled "Bioconcentrating but readily biodegradable" are expected to have their bioconcentration potential disappear rapidly from aerobic environments with conditions that favor biodegradation. Components contributing most to the toxicity and bioconcentration potential have the potential to biodegrade rapidly. This means that their potential to bioconcentrate is likely to disappear rapidly from aerobic environments with conditions that favor biodegradation. Inorganic: Potassium Hydroxide (1310-58-3).

Readily biodegradable: 2-Butoxyethanol (111-76-2), Ethanolamine (141-43-5), Ethoxylated Secondary Alcohol (84133-50-6), Ethoxylated Alcohol (68439-45-2).

Bioconcentrating but readily biodegradable: Ethoxylated Secondary Alcohol (84133-50-6), Ethoxylated Alcohol (68439-45-2).

Log Kow <3: 2-Butoxycthanol (111-76-2), Ethanolamine (141-43-5).

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: Wash affected area with soap and water. If signs/symptoms develop, get medical attention.

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

If Swallowed: Do not induce vomiting. Get immediate medical attention.

SECTION 5: FIRE FIGHTING MEASURES

5.1 FLAMMABLE PROPERTIES

Autoignition temperature

Flash Point

Not Applicable
Flammable Limits - LEL

Flammable Limits - UEL

Not Applicable

Not Applicable

5.2 EXTINGUISHING MEDIA

Material will not burn.

5.3 PROTECTION OF FIRE FIGHTERS

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.

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Unusual Fire and Explosion Hazards: Not applicable.

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

SECTION 6: ACCIDENTAL RELEASE MEASURES

Accidental Release Measures Refer to other sections of this MSDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment. Call 3M-HELPS line (1-800-364-3577) for more information on handling and managing the spill. 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. Dilute in a large excess of water. Carefully, and with stirring, add appropriate dilute acid such as sulfamic acid or vinegar. Confirm neutrality. 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. Clean up residue with detergent and water. Collect the resulting residue containing solution. Place in a metal container approved for use in transportation by appropriate authorities. The container must be lined with polyethylene plastic or contain a plastic drum liner made of polyethylene. Cover, but do not seal for 48 hours. Dispose of collected material as soon as possible.

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 breathing of vapors, mists or spray. Do not eat, drink or smoke when using this product. Wash exposed areas thoroughly with soap and water. Contents may be under pressure, open carefully. For industrial or professional use only. Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below Occupational Exposure Limits. If ventilation is not adequate, use respiratory protection equipment. Avoid eye contact with vapors, mists, or spray.

7.2 STORAGE

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. If sufficient ventilation is not available, particularly in confined spaces, use appropriate respiratory protection.

8.2 PERSONAL PROTECTIVE EQUIPMENT (PPE)

8.2.1 Eye/Face Protection

Avoid cyc contact. Avoid cyc contact with vapors, mists, or spray.

8.2.2 Skin Protection

Avoid skin contact.

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8.2.3 Respiratory Protection

Under normal use conditions, airborne exposures are not expected to be significant enough to require respiratory protection. Avoid breathing of vapors, mists or spray.

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>Ingredien</u> t | Authority | Type | Limit | Additional Information |
|---------------------|-----------|---------|---------|---|
| 2-BUTOXYETHANOL | ACGIH | TWA | 20 ppm | Table A3 |
| 2-BUTOXYETHANOL | OSHA | TWA, | 25 ppm | Skin Notation* |
| | | Vacated | | |
| 2-BUTOXYETHANOL | OSHA | TWA | 50 ppm | Skin Notation*; Table Z-1 |
| ETHANOLAMINE | ACGIH | TWA | 3 ppm | usuu sakantin mataka siin taasi tii meen suutooluvata simu, ke neema kuno ee saat saat saat saat on ahin |
| ETHANOLAMINE | ACGIH | STEL | 6 ppm | |
| ETHANOLAMINE | OSHA | TWA | 3 ppm | Table Z-1 A |
| ETHANOLAMINE | OSHA | STEL | 6 ppm | Table Z-1A |
| POTASSIUM HYDROXIDE | ACGIH | CEIL | 2 mg/m3 | |
| POTASSIUM HYDROXIDE | OSHA | CEIL | 2 mg/m3 | Table Z-1A |

^{*} Substance(s) 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.

VAC Vacated PEL: Vacated Permissible Exposure Limits [PEL] are enforced as the OSHA PEL in some states. Check with your local regulatory agency.

SOURCE OF EXPOSURE LIMIT DATA:

Boiling point

Vapor Density

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; essentially colorless; mild solvent odor

General Physical Form: Liquid

Autoignition temperature No Data Available

Flash Point Not Applicable

Flammable Limits - LEL Not Applicable Flammable Limits - UEL Not Applicable

Vapor Pressure <=16 psia [@ 131 °F] [Details: MITS data]

Specific Gravity Approximately 1 Units not avail or not appl. [Ref Std: WATER=1]

Approximately 212 F

No Data Available

12.4 - 13.8 pН

Melting point Not Applicable

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Solubility in Water Evaporation rate

Volatile Organic Compounds

Percent volatile

VOC Less H2O & Exempt Solvents

Viscosity

Complete

Approximately 1 Units not avail. or not appl. [Ref Std: WATER=1]

Approximately 6 %

Approximately 95 % weight

Approximately 6 %

<=100 centipoise

SECTION 10: STABILITY AND REACTIVITY

Stability:Stable.

Materials and Conditions to Avoidtone known

Hazardous Polymerization Hazardous polymerization will not occur.

Hazardous Decomposition or By-Products

Substance
Carbon monoxide
Carbon dioxide

Condition

Not Specified 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

Test Organism

Test Type

Result See 3.3

CHEMICAL FATE INFORMATION

Test Type

Result See 3.3 Protocol

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SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal MethodIncinerate in a permitted hazardous waste incinerator in the presence of a combustible material. As a disposal alternative, dispose of waste product in a permitted hazardous waste facility.

EPA Hazardous Waste Number (RCRAD002 (Corrosive)

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

SECTION 14:TRANSPORT INFORMATION

ID Number(s):

98-0798-2323-7, 98-0798-2498-7, 98-0798-2499-5

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

Section 313 Toxic Chemicals subject to the reporting requirements of that section and 40 CFR part 372 (EPCRA):

Ingredient C.A.S. No % by Wt 2-BUTOXYETHANOL (GLYCOL ETHERS) 111-76-2 3 - 7

STATE REGULATIONS

Contact 3M for more information.

CHEMICAL 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.

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

Contact 3M for more information.

INTERNATIONAL REGULATIONS

Contact 3M for more information.

WHMIS: Hazardous

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: 0 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: 1 Flammability: 0 Reactivity: 0 Protection: X - See PPE section.

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:

Section 7: Handling information was modified.

Section 8: Eye/face protection information was modified.

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