Material Safety Data Sheet

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SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: 3M™ PRETREATMENT CLEANER (CONCENTRATE) (Product No. 10, Twist ‘n Fill™ System)
MANUFACTURER: 3M
DIVISION: Building & Commercial Services Division
ADDRESS: 3M Center
St. Paul, MN  55144-1000

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

Issue Date: 06/11/2008
Supercedes Date: 04/03/2007
Document Group: 06-2712-5

Product Use: Intended Use: Carpet Care

SECTION 2: INGREDIENTS

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>C.A.S. No.</th>
<th>% by Wt</th>
</tr>
</thead>
<tbody>
<tr>
<td>WATER</td>
<td>7732-18-5</td>
<td>40 - 70</td>
</tr>
<tr>
<td>HYDROXYALKYL AMINE OXIDES</td>
<td>68478-65-9</td>
<td>10 - 30</td>
</tr>
<tr>
<td>ISOPROPYL ALCOHOL</td>
<td>67-63-0</td>
<td>5 - 10</td>
</tr>
<tr>
<td>ETHYLENE GLYCOL ETHYLHEXYL ETHER</td>
<td>1559-35-9</td>
<td>1 - 5</td>
</tr>
<tr>
<td>FRAGRANCE (PROPRIETARY MIXTURE)</td>
<td>Trade Secret</td>
<td>0.5   1.5</td>
</tr>
<tr>
<td>DIETHYLENE GLYCOL MONO (2-ETHYLHEXYL) ETHER</td>
<td>1559-36-0</td>
<td>0.1 - 1</td>
</tr>
</tbody>
</table>

SECTION 3: HAZARDS IDENTIFICATION

3.1 EMERGENCY OVERVIEW

Specific Physical Form: Liquid
Odor, Color, Grade: Clear, colorless; mild fragrance
General Physical Form: Liquid
Immediate health, physical, and environmental hazards: Combustible liquid and vapor. May cause severe eye irritation. May cause allergic skin reaction. May cause target organ effects.

3.2 POTENTIAL HEALTH EFFECTS
Eye Contact:
Severe Eye Irritation: Signs/symptoms may include significant redness, swelling, pain, tearing, cloudy appearance of the cornea, and impaired vision.

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

Inhalation:
Respiratory Tract Irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain. May be absorbed following inhalation and cause target organ effects.

Ingestion:
Gastrointestinal Irritation: Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhea. May be absorbed following ingestion and cause target organ effects.

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

A 3M Product Environmental Data Sheet (PED) is available.
The use of this product is expected to have no significant environmental impact. All components will eventually degrade in the environment.

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: Immediately flush eyes with large amounts of water for at least 15 minutes. Get immediate 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 unless instructed to do so by medical personnel. Give victim two glasses of water. Never give anything by mouth to an unconscious person. Get 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>Approximately 750 °F</td>
</tr>
<tr>
<td></td>
<td>[Details: Isopropyl alcohol]</td>
</tr>
<tr>
<td>Flash Point</td>
<td>102 °F [Test Method: Closed Cup]</td>
</tr>
<tr>
<td>Flammable Limits - LEL</td>
<td>2.0 % volume [Details: Isopropyl alcohol]</td>
</tr>
<tr>
<td>Flammable Limits - UEL</td>
<td>12.7 % volume [Details: @200F Isopropyl alcohol]</td>
</tr>
<tr>
<td>OSHA Flammability Classification</td>
<td>Class II 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: Wear full protective equipment (Bunker Gear) and a self-contained breathing apparatus (SCBA).
Unusual Fire and Explosion Hazards: Combustible 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: 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. Remove all ignition sources such as flames, smoking materials, and electrical spark sources. Use only non-sparking tools. 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. Cover spill area with a fire-extinguishing foam designed for use on solvents, such as alcohols and acetone, that can dissolve in water. An AR - AFFF type foam is recommended. 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. Remember, adding an absorbent material does not remove a toxic, corrosivity orflammability hazard. Collect as much of the spilled material as possible using non-sparking tools. Clean up residue with water. Collect the resulting residue containing solution. Place in a metal container approved for transportation by appropriate authorities. Seal the container. 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
Keep out of the reach of children. This product is not intended to be used without prior dilution as specified on the product label. Avoid breathing of vapors, mists or spray. Avoid skin contact. Avoid eye contact. 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. Avoid contact with oxidizing agents.

7.2 STORAGE
Store away from heat. Store out of direct sunlight. Store away from oxidizing agents.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 ENGINEERING CONTROLS
Use in a well-ventilated area. NOTE: When used as directed and diluted and dispensed with a TWIST ’n FILL(TM) Chemical Dispenser, special ventilation is not required.

8.2 PERSONAL PROTECTIVE EQUIPMENT (PPE)
8.2.1 Eye/Face Protection
Avoid eye contact. NOTE: When used as directed and diluted and dispensed with a TWIST ‘n FILL(TM) Chemical Dispenser, eye contact with the concentrate is not expected to occur.

If the product is not used with the Twist ‘n Fill system or if there is an accidental release, the following eye protection is recommended: Indirect Vented Goggles, Full Face Shield.

8.2.2 Skin Protection
Avoid skin contact. NOTE: When used as directed and diluted and dispensed with a TWIST ‘n FILL(TM) Chemical Dispenser, skin contact with the concentrate is not expected to occur.

If the product is not used with the Twist ‘n Fill system or if there is an accidental release, 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 is recommended: Butyl Rubber

8.2.3 Respiratory Protection
Avoid breathing of vapors, mists or spray. Under normal use conditions, airborne exposures are not expected to be significant enough to require respiratory protection. NOTE: When used as directed and diluted and dispensed with a TWIST ‘n FILL(TM) Chemical Dispenser, respiratory protection is not required.

If the product is not used with the Twist ‘n Fill system or if there is an accidental release, 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>ISOPROPYL ALCOHOL</td>
<td>ACGIH</td>
<td>TWA</td>
<td>200 ppm</td>
<td>Table A4</td>
</tr>
<tr>
<td>ISOPROPYL ALCOHOL</td>
<td>ACGIH</td>
<td>STEL</td>
<td>400 ppm</td>
<td>Table A4</td>
</tr>
<tr>
<td>ISOPROPYL ALCOHOL</td>
<td>OSHA</td>
<td>TWA</td>
<td>400 ppm</td>
<td>Table Z-1A</td>
</tr>
<tr>
<td>ISOPROPYL ALCOHOL</td>
<td>OSHA</td>
<td>STEL</td>
<td>500 ppm</td>
<td>Table Z-1A</td>
</tr>
</tbody>
</table>

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

Specific Physical Form: Liquid
Odor, Color, Grade: Clear, colorless; mild fragrance
General Physical Form: Liquid
Autoignition temperature: Approximately 750 °F [Details: Isopropyl alcohol]
Flash Point: 102 °F [Test Method: Closed Cup]
Flammable Limits - LEL: 2.0 % volume [Details: Isopropyl alcohol]
Flammable Limits - UEL: 12.7 % volume [Details: @200°F Isopropyl alcohol]
Boiling point: Approximately 200 °F
Density: Approximately 1 [Ref Std: WATER=1]
Vapor Density: Approximately 2 [Ref Std: AIR=1] [Details: Isopropyl alcohol]
Vapor Pressure
<=27 psia [@ 131 °F]

Specific Gravity
Approximately 1 [Ref Std: WATER=1]

pH
6 - 8

Solubility in Water
Complete

Evaporation rate
Approximately 1 [Ref Std: WATER=1]

Hazardous Air Pollutants
Not Applicable

Volatile Organic Compounds
7 - 13 % [Test Method: calculated per CARB title 2]

Percent volatile
No Data Available

Percent volatile
Not Applicable

VOC Less H2O & Exempt Solvents
209 - 389 g/l [Test Method: calculated per CARB title 2]

Viscosity
< 100 centipoise

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>During Combustion</td>
</tr>
<tr>
<td>Carbon dioxide</td>
<td>During Combustion</td>
</tr>
<tr>
<td>Oxides of Nitrogen</td>
<td>During Combustion</td>
</tr>
</tbody>
</table>

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
A 3M Product Environmental Data Sheet (PED) is available.

CHEMICAL FATE INFORMATION
A 3M Product Environmental Data Sheet (PED) is available.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal Method: Incinerate 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 (RCRA): D001 (Ignitable)
Since regulations vary, consult applicable regulations or authorities before disposal.

SECTION 14: TRANSPORT INFORMATION

<table>
<thead>
<tr>
<th>ID Number</th>
<th>UPC</th>
<th>ID Number</th>
<th>UPC</th>
</tr>
</thead>
<tbody>
<tr>
<td>70-0708-4010-6</td>
<td>00-48011-19214-2</td>
<td>70-0710-0970-1</td>
<td>00-48011-23893-2</td>
</tr>
</tbody>
</table>

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

311/312 Hazard Categories:
Fire Hazard - Yes  Pressure Hazard - No  Reactivity Hazard - No  Immediate Hazard - Yes  Delayed Hazard - No

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

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>C.A.S. No</th>
<th>% by Wt</th>
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</thead>
<tbody>
<tr>
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<td>1559-35-9</td>
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<td>1559-36-0</td>
<td>0.1 - 1</td>
</tr>
</tbody>
</table>

STATE REGULATIONS

CHEMICAL INVENTORIES

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

All the components of this product are listed on China's Inventory of Chemical Substances.

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

INTERNATIONAL REGULATIONS

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

<table>
<thead>
<tr>
<th>Health</th>
<th>Flammability</th>
<th>Reactivity</th>
<th>Special Hazards</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>2</td>
<td>0</td>
<td>None</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Health</th>
<th>Flammability</th>
<th>Reactivity</th>
<th>Protection</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>2</td>
<td>0</td>
<td>X - See PPE section</td>
</tr>
</tbody>
</table>

Hazardous Material Identification System (HMIS®) 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 conditions.
situations. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint and Coatings Association (NPCA).

Revision Changes:
Section 1: Product use information was modified.
Copyright was modified.
Section 14: ID Number(s) and/or UPC(s) Template 1 was added.
Section 2: Ingredient table was added.
Section 15: EPCRA 313 information was added.
Section 15: EPCRA 313 text was added.
Section 8: Exposure guidelines ingredient information was added.
Section 8: Exposure guidelines data source legend was added.

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