Material Safety Data Sheet

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SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT NAME:** 3M ULTRATHON(TM) INSECT REPELLENT 8 (SPRAY)
**MANUFACTURER:** 3M
**DIVISION:** Consumer & Office Business Sponsored
**ADDRESS:** 3M Center
St. Paul, MN 55144-1000

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

**Issue Date:** 10/19/2007
**Supercedes Date:** 08/29/2007
**Document Group:** 16-4412-9

**Product Use:**
**Intended Use:** INSECT REPELLENT

SECTION 2: INGREDIENTS

<table>
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<th>Ingredient</th>
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<td>INERT INGREDIENTS</td>
<td>Trade Secret</td>
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</table>

SECTION 3: HAZARDS IDENTIFICATION

3.1 EMERGENCY OVERVIEW

**Specific Physical Form:** Aerosol
**Odor, Color, Grade:** Light yellow with alcohol/DEET odor.
**General Physical Form:** Liquid -Aerosol
**Immediate health, physical, and environmental hazards:** Closed containers exposed to heat from fire may build pressure and explode. Aerosol container contains flammable material under pressure. May cause severe eye irritation. May cause target organ effects.

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

Skin Contact:
Prolonged or repeated exposure may cause:
- Mild Skin Irritation: Signs/symptoms may include localized redness, swelling, and itching.

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

Intentional concentration and inhalation may be harmful or fatal.

May be absorbed following inhalation and cause target organ effects.

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

May be absorbed following ingestion and cause target organ effects.

Target Organ Effects:
Prolonged or repeated exposure may cause:
- Central Nervous System (CNS) Depression: Signs/symptoms may include headache, dizziness, drowsiness, incoordination, nausea, slowed reaction time, slurred speech, giddiness, and unconsciousness.

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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: 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. Give victim two glasses of water. Never give anything by mouth to an unconscious person. Get immediate medical attention. Call a physician or poison control center.

4.2 NOTE TO PHYSICIANS
Probable mucosal damage may contraindicate the use of gastric lavage.

SECTION 5: FIRE FIGHTING MEASURES

5.1 FLAMMABLE PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
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<tbody>
<tr>
<td>Autoignition temperature</td>
<td>No Data Available</td>
</tr>
<tr>
<td>Flash Point</td>
<td>-75 °F [Test Method: Tagliabue Closed Cup] [Details: Flammable Gas]</td>
</tr>
<tr>
<td>Flammable Limits - LEL</td>
<td>1.8 %</td>
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<tr>
<td>Flammable Limits - UEL</td>
<td>12.7 %</td>
</tr>
<tr>
<td>OSHA Flammability Classification:</td>
<td>Class IB Flammable Liquid</td>
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</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: Closed containers exposed to heat from fire may build pressure and explode. Aerosol container contains flammable material under pressure.

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

SECTION 6: ACCIDENTAL RELEASE MEASURES

Accidental Release Measures: Observe precautions from other sections. 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. Clean up residue. Place in a metal container approved for transportation by appropriate authorities. 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 away from heat, sparks, open flame, pilot lights and other sources of ignition. Do not pierce or burn container, even after use. Aerosol container contains flammable gas under pressure. Avoid eye contact with vapors, mists, or spray. Keep out of the reach of children. Wash hands thoroughly with soap and water after applying product.
7.2 STORAGE
Store away from acids. Store away from heat. Store out of direct sunlight. Keep container in well-ventilated area.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 ENGINEERING CONTROLS
Use in a well-ventilated area.

8.2 PERSONAL PROTECTIVE EQUIPMENT (PPE)

8.2.1 Eye/Face Protection
Avoid eye contact with vapors, mists, or spray.

8.2.2 Skin Protection
Gloves are not required.

Do not use on synthetic fabrics, plastics, watch crystals, leather, painted, or varnished surfaces. After returning indoors, wash treated skin with soap and water. Wash treated clothing.

8.2.3 Respiratory Protection
Avoid breathing of vapors, mists or spray.

8.2.4 Prevention of Swallowing
Wash hands thoroughly with soap and water after applying product.

8.3 EXPOSURE GUIDELINES

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<td>1,1-DIFLUOROETHANE (PROPELLENT)</td>
<td>CMRG</td>
<td>TWA</td>
<td>1000 ppm</td>
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<tr>
<td>ISOBUTANE (PROPELLENT)</td>
<td>ACGIH</td>
<td>TWA</td>
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<td>TWA</td>
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<td>STEL</td>
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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: Aerosol
Odor, Color, Grade: Light yellow with alcohol/DEET odor.
General Physical Form: Liquid -Aerosol
Autoignition temperature: No Data Available
Flash Point: -75 °F [Test Method: Tagliabue Closed Cup] [Details: Flammable]
Gas]
Flammable Limits - LEL 1.8 %
Flammable Limits - UEL 12.7 %
Boiling point No Data Available
Density .867 g/ml [Details: (Liquid portion only)]
Vapor Density No Data Available
Vapor Pressure 33 mmHg [@ 68 °F]
Specific Gravity .867 [Ref Std: WATER=1] [Details: (Liquid Portion Only)]
pH 4.6 [Details: 1% water solution]
Melting point Not Applicable
Solubility in Water Negligible
Evaporation rate No Data Available
Volatile Organic Compounds 0 % [Test Method: calculated per CARB title 2]
VOC Less H2O & Exempt Solvents 0 % [Test Method: calculated per EPA method 24]
Viscosity 11.0 centipoise [Test Method: ACS METHOD] [Details: (Liquid portion only)]

SECTION 10: STABILITY AND REACTIVITY

Stability: Stable.

Materials and Conditions to Avoid: Heat; Sparks and/or flames

Hazardous Polymerization: Hazardous polymerization will not occur.

Hazardous Decomposition or By-Products

<table>
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<tr>
<td>Carbon dioxide</td>
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SECTION 11: TOXICOLOGICAL INFORMATION

Product-Based Toxicology Information:

Use of this product may cause skin reactions in rare cases.

SECTION 12: ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION

Not determined.

CHEMICAL FATE INFORMATION
SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal Method: Do not puncture or burn cans in a household incinerator. Dispose of waste product in a permitted hazardous waste facility. Facility must be capable of handling aerosol cans. Dispose of empty product containers in a sanitary landfill.

EPA Hazardous Waste Number (RCRA): D001 (Ignitable)

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

SECTION 14: TRANSPORT INFORMATION

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</tbody>
</table>

Please contact the emergency numbers listed on the first page of the MSDS for Transportation Information for this...
SECTION 15: REGULATORY INFORMATION

US FEDERAL REGULATIONS
Contact 3M for more information.

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

STATE REGULATIONS
Contact 3M for more information.

CHEMICAL INVENTORIES
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.

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:  4   Reactivity:  0   Special Hazards:  None
Aerosol Storage Code:  3

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:  4   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 14: ID Number(s) and/or UPC(s) Template 1 was added.
Section 2: Ingredient table was added.
Section 8: Exposure guidelines ingredient information was added.
Section 8: Exposure guidelines data source legend was added.

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