



## Material Safety Data Sheet

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### SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT NAME:** 3M CLOTHING AND GEAR INSECT REPELLENT (TM)

**MANUFACTURER:** 3M

**DIVISION:** Protective Materials & Consumer Specialties Division

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

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

**Issue Date:** 10/05/2004

**Supersedes Date:** 05/20/2004

**Document Group:** 18-7655-6

**Product Use:**

Specific Use: Insect Repellent

### SECTION 2: INGREDIENTS

<u>Ingredient</u>	<u>C.A.S. No.</u>	<u>% by Wt</u>
PERMETHRIN	52645-53-1	0.5
WATER	7732-18-5	82 - 84
OTHER INERT INGREDIENTS	Mixture	6 - 8
LIQUEFIED PETROLEUM GAS (PROPELLENT)	68476-85-7	10

### SECTION 3: HAZARDS IDENTIFICATION

#### 3.1 EMERGENCY OVERVIEW

**Specific Physical Form:** Aerosol

**Odor, Color, Grade:** Milky opaque white liquid with petroleum distillate odor as it leaves the can.

**General Physical Form:** Gas Aerosol- liquid/gas mixture under pressure

**Immediate health, physical, and environmental hazards:** Aerosol container contains gas under pressure. Closed containers exposed to heat from fire may build pressure and explode. 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:**

Dermal Effects: Signs/symptoms may include tingling and/or burning sensations of the skin.

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:**

May be harmful if swallowed.

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:**

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

## 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 persist, 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	<i>Not Applicable</i>
Flammable Limits - LEL	<i>Not Applicable</i>
Flammable Limits - UEL	<i>Not Applicable</i>

## 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:** Aerosol container contains gas under pressure. Closed containers exposed to heat from fire may build pressure and explode.

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

## SECTION 6: ACCIDENTAL RELEASE MEASURES

**Accidental Release Measures:** If possible, seal leaking container. Place leaking containers in a well-ventilated area, preferably an operating exhaust hood, or if necessary outdoors on an impermeable surface until appropriate packaging for the leaking container or its contents is available.

Evacuate unprotected and untrained personnel from hazard area. The spill should be cleaned up by qualified personnel. Ventilate the area with fresh air. Contain spill. Avoid contact with organic materials. 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. Clean up residue with an appropriate solvent selected by a qualified and authorized person. Ventilate the area with fresh air. Read and follow safety precautions on the solvent label and MSDS. Collect the resulting residue containing solution. Place in a closed 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 out of the reach of children. Do not pierce or burn container, even after use. Do not spray near flames or sources of ignition. Keep away from heat, sparks, open flame, pilot lights and other sources of ignition. Avoid eye contact with vapors, mists, or spray. Avoid breathing of vapors, mists or spray. Wash hands thoroughly with soap and water after applying product.

### 7.2 STORAGE

Keep container in well-ventilated area. Keep container tightly closed. Store away from heat. Store out of direct sunlight. Do not store containers on their sides. Store away from oxidizing agents. Store away from acids. Store away from strong bases.

## 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

<u>Ingredient</u>	<u>Authority</u>	<u>Type</u>	<u>Limit</u>	<u>Additional Information</u>
LIQUEFIED PETROLEUM GAS (PROPELLENT)	ACGIH	TWA	1000 ppm	
LIQUEFIED PETROLEUM GAS (PROPELLENT)	OSHA	TWA	1000 ppm	Table Z-1A

#### 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:

Milky opaque white liquid with petroleum distillate odor as it leaves the can.

#### General Physical Form:

Gas Aerosol- liquid/gas mixture under pressure

#### Autoignition temperature

*No Data Available*

#### Flash Point

*Not Applicable*

#### Flammable Limits - LEL

*Not Applicable*

#### Flammable Limits - UEL

*Not Applicable*

#### Boiling point

7.29 °F [*Details:* (of mixture)]

#### Density

.97 g/ml [*Details:* For liquid fill portion only]

#### Vapor Density

*No Data Available*

#### Vapor Density

*No Data Available*

Vapor Pressure	46 psi [@ 70 °F]
Specific Gravity	.97 [Ref Std: WATER=1] [Details: For liquid fill portion only]
pH	6.8 [Details: For liquid fill portion only]
Melting point	Not Applicable
Solubility in Water	Negligible [Details: Emulsifiable]

## SECTION 10: STABILITY AND REACTIVITY

**Stability:** Stable.

**Materials and Conditions to Avoid:** Strong acids; Strong bases; Strong oxidizing agents

**Hazardous Polymerization:** Hazardous polymerization will not occur.

### Hazardous Decomposition or By-Products

<u>Substance</u>	<u>Condition</u>
Chlorine	During Combustion
Carbon monoxide	During Combustion
Carbon dioxide	During Combustion
Oxides of Nitrogen	During Combustion

## SECTION 11: TOXICOLOGICAL INFORMATION

### Component-Based Toxicology Information:

Permethrin has been shown to cause nervous system effects in experimental animals following ingestion of very large doses. Some of these effects have included tremors, depressed reflexes and lack of coordination.

## SECTION 12: ECOLOGICAL INFORMATION

### ECOTOXICOLOGICAL INFORMATION

Not determined.

### CHEMICAL FATE INFORMATION

Not determined.

## SECTION 13: DISPOSAL CONSIDERATIONS

**Waste Disposal Method:** Do not puncture or burn cans in a household incinerator. Incinerate in an industrial or commercial facility in the presence of a combustible material. Combustion products will include HCl. Facility must be capable of handling halogenated materials.

As a disposal alternative, dispose of waste product in a facility permitted to accept chemical waste. Dispose of empty product containers in a sanitary landfill.

**EPA Hazardous Waste Number (RCRA):** Not regulated

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

## SECTION 14: TRANSPORT INFORMATION

**ID Number(s):**

70-0711-7695-5, 70-0712-0570-5, 70-0712-2214-8, 70-1000-7290-2, 70-1000-9579-6

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

### STATE REGULATIONS

Contact 3M for more information.

### CHEMICAL INVENTORIES

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: 1 Flammability: 4 Reactivity: 1 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: 4 Reactivity: 1 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) was modified.

Section 9: Boiling point information was modified.

Section 3 and Section 9: General physical form information was modified.

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