# Buggspray Insect Repellent for Biting Flies
## Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

**Date of issue**: 12/21/2015  
**Version**: 1.1

## SECTION 1: Identification

### 1.1. Identification

<table>
<thead>
<tr>
<th>Product form</th>
<th>Mixture</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product name</td>
<td>Buggspray Insect Repellent for Biting Flies</td>
</tr>
</tbody>
</table>

### 1.2. Relevant identified uses of the substance or mixture and uses advised against

| Use of the substance/mixture | Insect repellent |

### 1.3. Details of the supplier of the safety data sheet

- **Bugg Products LLC**  
  14505 21st Ave N Ste 214  
  Plymouth, MN 55447  
  T (763) 569-9800

### 1.4. Emergency telephone number

- **Emergency number**: (763) 569-9800

## SECTION 2: Hazard(s) identification

### 2.1. Classification of the substance or mixture

**GHS-US classification**
- Flam. Liq. 2  Flammable liquids Category 2  
- Skin Irrit. 2  Skin corrosion/irritation Category 2  
- STOT SE 3  Specific target organ toxicity (single exposure) Category 3

### 2.2. Label elements

**GHS-US labeling**

| Hazard pictograms (GHS-US) | ![GHS02] ![GHS07] |

<table>
<thead>
<tr>
<th>Signal word (GHS-US)</th>
<th>Danger</th>
</tr>
</thead>
</table>
| Hazard statements (GHS-US) | Highly flammable liquid and vapor  
Causes skin irritation  
May cause drowsiness or dizziness |
| Precautionary statements (GHS-US) | Keep away from heat, hot surfaces, open flames, sparks. - No smoking  
Use explosion-proof electrical equipment  
Use only non-sparking tools  
Take precautionary measures against static discharge  
Avoid breathing mist, spray, vapors  
Wash hands thoroughly after handling  
Use only outdoors or in a well-ventilated area  
Wear protective gloves  
If on skin: Wash with plenty of water  
If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower  
If inhaled: Remove person to fresh air and keep comfortable for breathing  
Call a POISON CENTER if you feel unwell  
Specific treatment (see If medical advice is needed, have product container or label at hand,  
Keep out of reach of children on this label)  
If skin irritation occurs: Get medical advice/attention  
Take off contaminated clothing and wash it before reuse  
In case of fire: Use carbon dioxide (CO2), foam to extinguish  
Store in a well-ventilated place. Keep cool  
Store locked up  
Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation |

### 2.3. Other hazards

No additional information available
2.4. Unknown acute toxicity (GHS US)
Not applicable

SECTION 3: Composition/Information on ingredients

3.1. Substance
Not applicable

3.2. Mixture

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>%</th>
<th>GHS-US classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Isopropanol</td>
<td>(CAS No) 67-63-0</td>
<td>67.5</td>
<td>Flam. Liq. 2, H225, STOT SE 3, H336</td>
</tr>
<tr>
<td>N,N-Diethyl-m-toluamide (DEET)</td>
<td>(CAS No) 134-62-3</td>
<td>25</td>
<td>Acute Tox. 4 (Oral), H302, Skin Irrit. 2, H315, Aquatic Chronic 3, H412</td>
</tr>
<tr>
<td>n-Octyl bicycloheptene dicarboximide</td>
<td>(CAS No) 113-48-4</td>
<td>5</td>
<td>Acute Tox. 4 (Dermal), H312</td>
</tr>
</tbody>
</table>

Full text of H-phrases: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general: Call a poison center/doctor/physician if you feel unwell.
First-aid measures after inhalation: Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact: Rinse skin with water/shower. Remove/Take off immediately all contaminated clothing. If skin irritation occurs: Get medical advice/attention.
First-aid measures after eye contact: Rinse eyes with water as a precaution.
First-aid measures after ingestion: Call a poison center/doctor/physician if you feel unwell.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries after skin contact: Irritation.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media


5.2. Special hazards arising from the substance or mixture

Fire hazard: Highly flammable liquid and vapor.
Reactivity: Highly flammable liquid and vapor.

5.3. Advice for firefighters

Protection during firefighting: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures: Ventilate spillage area. No open flames, no sparks, and no smoking. Avoid breathing dust/fume/gas/mist/vapors/spray. Avoid contact with skin and eyes.

6.1.2. For emergency responders

Protective equipment: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up: Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters.

Other information: Dispose of materials or solid residues at an authorized site.
6.4. Reference to other sections
For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling
Precautions for safe handling: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use only non-sparking tools. Take precautionary measures against static discharge. Use explosion-proof equipment. Wear personal protective equipment. Use only outdoors or in a well-ventilated area. Avoid breathing dust/fume/gas/mist/vapors/spray. Avoid contact with skin and eyes.

Hygiene measures: Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities
Storage conditions: Store in a well-ventilated place. Keep cool. Store locked up.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

<table>
<thead>
<tr>
<th>Isopropanol (67-63-0)</th>
<th>ACGIH TWA (ppm)</th>
<th>OSHA PEL (TWA) (mg/m³)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACGIH</td>
<td></td>
<td>200 ppm</td>
</tr>
<tr>
<td>ACGIH</td>
<td></td>
<td>400 ppm</td>
</tr>
<tr>
<td>ACGIH</td>
<td>Remark (ACGIH)</td>
<td>Eye &amp; URT irr; CNS impair</td>
</tr>
<tr>
<td>OSHA</td>
<td>OSHA PEL (TWA) (ppm)</td>
<td>980 mg/m³</td>
</tr>
<tr>
<td>OSHA</td>
<td></td>
<td>400 ppm</td>
</tr>
</tbody>
</table>

8.2. Exposure controls
Appropriate engineering controls: Ensure good ventilation of the work station.
Hand protection: Protective gloves.
Eye protection: Safety glasses.
Skin and body protection: Wear suitable protective clothing.
Respiratory protection: In case of insufficient ventilation, wear suitable respiratory equipment.
Environmental exposure controls: Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

- Physical state: Liquid
- Color: Yellow
- Odor: Sweet
- Odor threshold: No data available
- pH: No data available
- Melting point: Not applicable
- Freezing point: No data available
- Boiling point: > 100 °F
- Flash point: 53 °F
- Relative evaporation rate (butyl acetate=1): No data available
- Flammability (solid, gas): No data available
- Explosion limits: No data available
- Explosive properties: No data available
- Oxidizing properties: No data available
- Vapor pressure: No data available
- Relative density: No data available
- Relative vapor density at 20 °C: No data available
- Solubility: No data available
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Log Pow : No data available
Auto-ignition temperature : No data available
Decomposition temperature : No data available
Viscosity : No data available
Viscosity, kinematic : No data available
Viscosity, dynamic : No data available

9.2. Other information
No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity
Highly flammable liquid and vapor.

10.2. Chemical stability
Stable under normal conditions.

10.3. Possibility of hazardous reactions
No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid
Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.

10.5. Incompatible materials
No additional information available

10.6. Hazardous decomposition products
Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

N,N-Diethyl-m-toluamide (DEET) (134-62-3)

<table>
<thead>
<tr>
<th>Route</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50 oral rat</td>
<td>1892 mg/kg</td>
</tr>
<tr>
<td>LD50 dermal rat</td>
<td>&gt; 5000 mg/kg</td>
</tr>
<tr>
<td>ATE US (oral)</td>
<td>1892.000 mg/kg body weight</td>
</tr>
</tbody>
</table>

n-Octyl bicycloheptene dicarboximide (113-48-4)

<table>
<thead>
<tr>
<th>Route</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50 oral rat</td>
<td>4980 mg/kg</td>
</tr>
<tr>
<td>LD50 dermal rabbit</td>
<td>2000 mg/kg</td>
</tr>
<tr>
<td>ATE US (oral)</td>
<td>4980.000 mg/kg body weight</td>
</tr>
<tr>
<td>ATE US (dermal)</td>
<td>2000.000 mg/kg body weight</td>
</tr>
</tbody>
</table>

Isopropanol (67-63-0)

<table>
<thead>
<tr>
<th>Route</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50 oral rat</td>
<td>5000 mg/kg</td>
</tr>
<tr>
<td>LD50 dermal rabbit</td>
<td>12800 mg/kg</td>
</tr>
<tr>
<td>LC50 inhalation rat (ppm)</td>
<td>45248 ppm/1h</td>
</tr>
<tr>
<td>ATE US (oral)</td>
<td>5000.000 mg/kg body weight</td>
</tr>
<tr>
<td>ATE US (dermal)</td>
<td>12800.000 mg/kg body weight</td>
</tr>
<tr>
<td>ATE US (gases)</td>
<td>22624.000 ppmV/4h</td>
</tr>
</tbody>
</table>

Skin corrosion/irritation : Causes skin irritation.
Serious eye damage/irritation : Not classified
Respiratory or skin sensitization : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified

Isopropanol (67-63-0)

<table>
<thead>
<tr>
<th>Route</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>IARC group</td>
<td>3 - Not classifiable</td>
</tr>
</tbody>
</table>

Reproductive toxicity : Not classified
Specific target organ toxicity (single exposure) : May cause drowsiness or dizziness.
Specific target organ toxicity (repeated exposure) : Not classified
Aspiration hazard : Not classified
Symptoms/injuries after skin contact : Irritation.

SECTION 12: Ecological information
12.1. Toxicity
Ecology - general : The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.

<table>
<thead>
<tr>
<th>N,N-Diethyl-m-toluamide (DEET) (134-62-3)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>EC50 Daphnia 1</td>
<td>75 ppm</td>
</tr>
<tr>
<td>ErC50 (algae)</td>
<td>8 mg/l</td>
</tr>
</tbody>
</table>

12.2. Persistence and degradability
No additional information available

12.3. Bioaccumulative potential
No additional information available

12.4. Mobility in soil
No additional information available

12.5. Other adverse effects
Effect on the global warming : No known ecological damage caused by this product.

SECTION 13: Disposal considerations
13.1. Waste treatment methods
Waste treatment methods : Dispose of contents/container in accordance with licensed collector’s sorting instructions.

SECTION 14: Transport information
Department of Transportation (DOT)
In accordance with DOT
Transport document description : ID8000 Consumer commodity, 9
UN-No.(DOT) : ID8000
Proper Shipping Name (DOT) : Consumer commodity
Transport hazard class(es) (DOT) : 9 - Class 9 - Miscellaneous hazardous material 49 CFR 173.140
Hazard labels (DOT) : 9 - Class 9 (Miscellaneous dangerous materials)

DOT Packaging Non Bulk (49 CFR 173.xxx) : 167
DOT Packaging Bulk (49 CFR 173.xxx) : None
DOT Packaging Exceptions (49 CFR 173.xxx) : This product meets the exception requirements of section 173.306 as a limited quantity and may be shipped as a limited quantity. Until 12/31/2020, the "Consumer Commodity - ORM-D" marking may still be used in place of the new limited quantity diamond mark for packages of ID8000 Consumer Commodities. Limited quantities require the limited quantity diamond mark on cartons after 12/31/20 and may be used now in place of the "Consumer Commodity ORM-D" marking and both may be displayed concurrently.

DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27) : 30 kg
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DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75): 30 kg gross
Other information: No supplementary information available.

TDG
No additional information available

Transport by sea
UN-No. (IMDG): 1993
Proper Shipping Name (IMDG): FLAMMABLE LIQUIDS, NOS (Isopropanol)
Class (IMDG): 3 - Flammable liquids
Packing group (IMDG): II - substances presenting medium danger
Limited quantities (IMDG): LTQ QTY

Air transport
UN-No. (IATA): ID8000
Proper Shipping Name (IATA): Consumer commodity
Class (IATA): 9 - Miscellaneous Dangerous Goods
Instruction "passenger" - Limited quantities (ICAO): LTQ QTY

SECTION 15: Regulatory information

15.1. US Federal regulations
All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory except for:

- n-Octyl bicycloheptene dicarboximide CAS No 113-48-4 5%
- Di-n-propyl isocinchomeranate CAS No 136-45-8 2.5%
- Isopropanol CAS No 67-63-0 67.5%

Isopropanol (67-63-0)
Subject to reporting requirements of United States SARA Section 313

15.2. International regulations
CANADA
No additional information available

EU-Regulations
No additional information available

National regulations

Buggspray Insect Repellent for Biting Flies
This chemical is a pesticide product registered by the United States Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets (SDS), and for workplace labels of non-pesticide chemicals. The pesticide label also includes other important information, including directions for use.

15.3. US State regulations

Buggspray Insect Repellent for Biting Flies

<table>
<thead>
<tr>
<th>U.S. - California - Proposition 65 - Carcinogens List</th>
<th>Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S. - California - Proposition 65 - Developmental Toxicity</td>
<td>No</td>
</tr>
<tr>
<td>U.S. - California - Proposition 65 - Reproductive Toxicity - Female</td>
<td>No</td>
</tr>
<tr>
<td>U.S. - California - Proposition 65 - Reproductive Toxicity - Male</td>
<td>No</td>
</tr>
</tbody>
</table>
California Proposition 65 - This product contains, or may contain, trace quantities of a substance(s) known to the state of California to cause cancer, developmental and/or reproductive harm

Isopropanol (67-63-0)
U.S. - New Jersey - Right to Know Hazardous Substance List

SECTION 16: Other information

Full text of H-phrases:

<table>
<thead>
<tr>
<th>Acute Tox. 4 (Dermal)</th>
<th>Acute toxicity (dermal) Category 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute Tox. 4 (Oral)</td>
<td>Acute toxicity (oral) Category 4</td>
</tr>
<tr>
<td>Aquatic Chronic 3</td>
<td>Hazardous to the aquatic environment - Chronic Hazard Category 3</td>
</tr>
<tr>
<td>Flam. Liq. 2</td>
<td>Flammable liquids Category 2</td>
</tr>
<tr>
<td>Skin Irrit. 2</td>
<td>Skin corrosion/irritation Category 2</td>
</tr>
<tr>
<td>STOT SE 3</td>
<td>Specific target organ toxicity (single exposure) Category 3</td>
</tr>
<tr>
<td>H225</td>
<td>Highly flammable liquid and vapor</td>
</tr>
<tr>
<td>H302</td>
<td>Harmful if swallowed</td>
</tr>
<tr>
<td>H312</td>
<td>Harmful in contact with skin</td>
</tr>
<tr>
<td>H315</td>
<td>Causes skin irritation</td>
</tr>
<tr>
<td>H336</td>
<td>May cause drowsiness or dizziness</td>
</tr>
<tr>
<td>H412</td>
<td>Harmful to aquatic life with long lasting effects</td>
</tr>
</tbody>
</table>

SDS US (GHS HazCom 2012)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product