1. PRODUCT AND COMPANY IDENTIFICATION

Product identifier
Product Name
United 158 BUG DEETERER

Other means of identification
SDS# UNITED-158

Recommended use of the chemical
And restrictions on use
Recommended use Personal Insect Repellent
Uses Advised Against For institutional and industrial use only.

Details of the supplier of the safety data sheet
Company Name United Laboratories, Inc.
320 37th Avenue
St. Charles, IL 60174
www.unitedlabsinc.com
www.unitedlabsinc.ca

Emergency telephone number
Emergency Telephone 800-323-2594 (to reorder)
INFOTRAC 1-800-535-5053 (North America)
1-352-323-3500 (International)

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status
This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

<table>
<thead>
<tr>
<th>Hazard Class</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flammable Aerosols</td>
<td>Category 1</td>
</tr>
<tr>
<td>Sensitization - Skin</td>
<td>Category 1</td>
</tr>
<tr>
<td>Eye Irritation</td>
<td>Category 2</td>
</tr>
<tr>
<td>Acute Hazard - hazardous to aquatic environment</td>
<td>Category 3</td>
</tr>
<tr>
<td>Gasses under pressure</td>
<td>Liquefied Gas</td>
</tr>
</tbody>
</table>

Label elements

Emergency Overview

Danger

Hazard statements
Extremely flammable aerosol. Contains gas under pressure; may explode if heated. May cause drowsiness or dizziness. Causes serious eye irritation. May cause an allergic skin reaction. Read label and SDS before use. Keep out of reach of children.
Appearance  Clear Colorless Spray Mist  
Physical state  Aerosol  
Odor  Pleasant

Prevention
Keep away from heat/sparks/open flames/hot surfaces. No smoking. Do not spray on an open flame or other ignition source. Pressurized container: Do not pierce or burn, even after use. Do not breathe mist/spray. Use only outdoors or in a well-ventilated area. Avoid over-application of this product. Do not spray directly onto face; spray on hands first and then apply sparingly and avoid eyes. Use only outdoors or in a well-ventilated area. Contaminated work clothing must not be allowed out of the workplace. After returning indoors wash treated skin with soap and water.

Response
Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get medical attention. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention. If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a poison center if you feel unwell.

Storage
Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F. Store in a well-ventilated place. Store locked up.

Disposal
Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard(s) not otherwise classified (HNOC)
No information available.

Supplemental information
Hazard statement
No information available.

3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS No.</th>
<th>Weight-%</th>
<th>Trade Secret</th>
</tr>
</thead>
<tbody>
<tr>
<td>Isobutane</td>
<td>75-28-5</td>
<td>&gt;=5,&lt;=10</td>
<td>*</td>
</tr>
<tr>
<td>Isopropanol</td>
<td>67-63-0</td>
<td>&gt;=35&lt;=40</td>
<td>*</td>
</tr>
<tr>
<td>Propane</td>
<td>74-98-6</td>
<td>&gt;=10&lt;=20</td>
<td>*</td>
</tr>
<tr>
<td>N-Octyl bicycloheptenedicarboximide</td>
<td>113-48-4</td>
<td>=5.0</td>
<td>*</td>
</tr>
<tr>
<td>N,N-diethyl-m-toluamide</td>
<td>134-62-3</td>
<td>=25</td>
<td>*</td>
</tr>
<tr>
<td>Di-n-propyl isocichomeronate</td>
<td>136-45-8</td>
<td>=2.5</td>
<td>*</td>
</tr>
</tbody>
</table>

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

First aid measures
Skin Contact
Wash with plenty of soap and water after returning indoors. If skin irritation or rash occurs get medical attention. Take off contaminated clothing and wash it before reuse.

Eye contact
Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.
Inhalation
Remove person to fresh air and keep comfortable for breathing. Call poison center or a physician if you feel unwell.

Ingestion
May be harmful if swallowed. Seek medical attention immediately. Do not induce vomiting.

Most important symptoms and effects, both acute and delayed
Skin irritation or rash.

Indication of any immediate medical attention and special treatment needed
Provide general supportive measures and treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Unsuitable extinguishing media
None known.

Specific hazards arising from the chemical
Flammable aerosol. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of subsequent explosion. Gas may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back, causing fire or explosion. Bursting aerosol containers may be propelled from a fire at high speed. Runoff to sewer may create fire or explosion hazard.

Protective equipment and precautions for firefighters
Firefighters must use standard protective equipment and SCBA with a full face piece operated in a positive pressure mode.

Hazardous thermal decomposition products
Carbon dioxide, Carbon monoxide.

Specific Methods
Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

General fire hazard
Extremely flammable aerosol.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures
Personal precautions
Keep unnecessary personnel away. Put on appropriate personal protective equipment. For personal protection, see Section 8 of this SDS.

Environmental precautions
Environmental precautions
Stop all leaks. Isolate hazard area. Keep unnecessary and unprotected personnel from entering. Eliminate all ignition sources. Disperse vapors with water spray. Prevent runoff from entering drains, sewers, streams or other bodies of water.

Methods and material for containment and cleaning up
Methods for containment
Prevent further leakage or spillage if safe to do so. Stop leak if you can do so without risk. Prevent entry into waterways, sewer, basements and bodies of water.

Methods for cleaning up
Absorb spill with inert material. Absorb unrecoverable product. Transfer contaminated absorbent, soil and other materials to containers for disposal.
7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Keep away from heat, sparks, flame and other sources of ignition. Exposure to temperatures above 120°F may cause bursting. Do not get into eyes. Keep out of reach of children. Intentional misuse by deliberately concentrating and inhaling may be harmful or fatal.

Conditions for safe storage, including any incompatibilities

Storage Conditions Do not handle or store near flame, heat and sources of ignition. Avoid exposure to direct sunlight, exceeding 120°F. Do not puncture or incinerate. Store in a cool, dry place.

Incompatible materials Store away from incompatible materials (see Section 10 of the SDS). Keep in a cool place is recommended.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
<th>NIOSH IDLH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Isobutane 75-28-5</td>
<td>STEL: 1000 ppm</td>
<td>-</td>
<td>TWA: 1900 mg/m³</td>
</tr>
<tr>
<td>Isopropanol 67-63-0</td>
<td>STEL: 400 ppm</td>
<td>PEL: 400 ppm</td>
<td>-</td>
</tr>
<tr>
<td>Propane 74-98-6</td>
<td>STEL: 1000 ppm</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

NIOSH IDLH Immediately Dangerous to Life or Health

Biological limited values
No biological exposure limits noted for these ingredient(s).

Appropriate engineering controls

Good general ventilation required.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses or goggles.

Skin and body protection To prevent repeated or prolonged contact, wear impervious gloves (made from rubber, nitrile or neoprene).

Respiratory protection Not required under typical use conditions. When respiratory protection is required use an organic vapor cartridge. A respiratory program that meets OSHA’s 29 CFR 1910.34&ANSIZ88.2 requirements must be followed.

General Hygiene When using do not eat, drink or smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoothing.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Values</th>
<th>Remarks</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Aerosol.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Appearance</td>
<td>Clear</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Color</td>
<td>Colorless Spray</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Odor</td>
<td>Pleasant</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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pH
Specific Gravity 0.889 (H2O=1)
Viscosity No Information available.
Melting point/freezing point No Information available.
Flash point 50°F (liquid portion)
Boiling point/boiling range No information available.
Evaporation rate No information available.
Flammability Limit – lower No information available.
Flammability Limit – upper No information available.
Vapor pressure 55 psig@72°F/22°C
Vapor density >Air
Relative density 0.9
Water Solubility Partially Soluble.
Partition coefficient No information available.
(n-octanol/water) No information available.
Auto-ignition temperature No information available.
Decomposition temperature No information available.
Viscosity No information available.
Density No information available.
Flash extension No information available.
Flammability class No information available.
Heat of combustion No information available.
Heat of combustion (NFPA 30B) No information available.
Percent volatile No information available.
VOC (weight %) <64.0%

10. STABILITY AND REACTIVITY

Reactivity
This product is stable and non-reactive under normal conditions of use, storage and transport.

Chemical stability
Material is stable at normal conditions.

Possibility of Hazardous Reactions
Hazardous polymerization does not occur.

Conditions to avoid
High temperatures, open flames, sparks and welding. (Vapors may ignite at temperatures exceeding flash point).

Incompatible materials
Strong oxidizers. Acids.

Hazardous Decomposition Products
CO, CO2.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Inhalation High vapor/aerosol concentrations (>1000 ppm) are irritating to the eyes and respiratory tract. May cause nose, throat and respiratory tract irritation, coughing and headache.

Eye contact Causes serious eye irritation. Symptoms include stinging, tearing and redness.

Skin Contact May cause skin reactions in rare cases. Symptoms may include redness and drying of
Ingestion
Symptoms related to the physical, chemical and toxicological characteristics

May be harmful if swallowed.
May cause eye irritation. May cause skin reactions in rare cases.

Information on toxicological effects

Acute toxicity
DEET: Oral, Rat: LD50 = 1892 mg/kg.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Dermal LD50</th>
<th>Oral LD50</th>
<th>Inhalation LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Butane 106-97-8</td>
<td>-</td>
<td>-</td>
<td>1237 mg/l, 120 minutes (Mouse)</td>
</tr>
<tr>
<td>White Mineral Oil 8042-47-5</td>
<td>&gt;2000 mg/kg, 24 hours (Rabbit)</td>
<td>5000.0001 mg/kg (Rat)</td>
<td>2.18 mg/l, 4 hours (Rat)</td>
</tr>
<tr>
<td>Propane 74-98-6</td>
<td>-</td>
<td>-</td>
<td>1355 mg/l (Rat)</td>
</tr>
</tbody>
</table>

*Estimates for product may be based on additional component data not shown.

Skin/Eye irritation
May cause skin sensitization.

Sensitization
Skin contact and contact to eyes, may cause irritation.

Germ cell mutagenicity
No information available to indicate product or any components present a greater than 0.1% are mutagenic or genotoxic.

Carcinogenicity
This product is not considered to be a carcinogen by IARC, ACGIH, NTP or OSHA.

Reproductive toxicity
The product is not expected to cause reproductive or developmental effects.

STOT - single exposure
No information available.

STOT - repeated exposure
Skin, central nervous system

Chronic/long term effects
Overexposure to this material through inhalation may cause central nervous system depression (dizziness, drowsiness, weakness, fatigue, nausea, headache and unconsciousness).

12. ECOLOGICAL INFORMATION

Ecotoxicity
DEET: LC50 Fish : Rainbow trout – 97 mg/l, 96 hr.; EC50 Daphnia – 75 ppm, 48 hr.

Persistence and degradability
No Information available.

Bioaccumulation
No Information available.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods
Disposal Considerations
Disposal should be in accordance with applicable regional, national and local laws and regulations. Do not puncture or incinerate.

14. TRANSPORT INFORMATION

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 UN 1950 Aerosols. Limited quantities require the limited quantity diamond mark on cartons after 12/31/2020 and may be used now in place of the "Consumer Commodity ORM-D" marking and both may be displayed concurrently.

DOT
UN/ID No.
UN1950
Proper shipping name: Aerosols, flammable.
Transport hazard class(es): 2.1
Packaging group: No information available.

**IATA**
- UN/ID No.: UN1950
- UN proper shipping name: Aerosols, flammable
- Transport hazard class(es): 2.1

**IMDG**
- UN/ID No.: UN1950
- Proper shipping name: Aerosols, flammable
- Transport hazard class(es): 2.1

### 15. REGULATORY INFORMATION

**International Inventories**

*Yes indicates that all components of this product comply with the inventory requirements administered by the governing country(s).*

<table>
<thead>
<tr>
<th>Legend:</th>
</tr>
</thead>
<tbody>
<tr>
<td>TSCA - United States Toxic Substances Control Act Section 8(b) Inventory - Yes</td>
</tr>
<tr>
<td>DSL/NDSL - Canadian Domestic Substances List – Yes Non-Domestic Substances List - No</td>
</tr>
</tbody>
</table>

**US Federal Regulations**

**SARA 302/304 Extremely hazardous**

None known.

**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372. Not regulated.

**SARA 311/312 Hazard Categories**

<table>
<thead>
<tr>
<th>Hazard Category</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute health hazard</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chronic Health Hazard</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Fire hazard</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Sudden release of pressure hazard</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Reactive Hazard</td>
<td>No</td>
<td></td>
</tr>
</tbody>
</table>
CERCLA Hazardous Substance List (40 CFR 302.4)
This material, as supplied, does not contain a substance regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40CFR 355).

RCRA Status
Under RCRA, it is the responsibility of the product user to determine at the time of disposal, whether a material containing the product or derived from the product should be classified as a hazardous waste. If this product becomes hazardous waste it would be assigned RCRA Code(s) D001

FIFRA information
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, and for workplace labels non-pesticide chemicals. The hazard information required on the pesticide label reproduced below. The pesticide label also includes other important information, including directions for use. Signal word: WARNING: Hazard statement: Causes substantial but temporary eye injury. Harmful if swallowed.

US State Regulations

California Proposition 65
This product does not contain a chemical known to the State of California to cause birth defects and other reproductive harm.

U.S. State Right-to-Know Regulations

16. OTHER INFORMATION

<table>
<thead>
<tr>
<th>NFPA</th>
<th>Health Hazards -</th>
<th>Flammability -</th>
<th>Reactivity -</th>
<th>Personal protection -</th>
</tr>
</thead>
<tbody>
<tr>
<td>HMIS</td>
<td>Health hazards 1</td>
<td>Flammability 4</td>
<td>Reactivity 0</td>
<td>Personal protection A</td>
</tr>
</tbody>
</table>

Issue Date 11-Apr-2015
Revision Date 23-July-2015
Revision Note No Information available
Disclaimer The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet