1. Product and Company Identification

<table>
<thead>
<tr>
<th>Product Name</th>
<th>Sergeant's Household Flea and Tick Spray</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS #</td>
<td>Mixture</td>
</tr>
<tr>
<td>Product use</td>
<td>Household Spray</td>
</tr>
<tr>
<td>Manufacturer</td>
<td>Sergeant's Pet Care Products, Inc.</td>
</tr>
<tr>
<td></td>
<td>2625 South 158th Plaza</td>
</tr>
<tr>
<td></td>
<td>Omaha, NE 68130-1770 US</td>
</tr>
<tr>
<td></td>
<td>Phone: 1-800-224-7387</td>
</tr>
<tr>
<td></td>
<td>Fax: 1-402-938-7099</td>
</tr>
<tr>
<td></td>
<td>ChemTrec: 1-800-424-9300</td>
</tr>
</tbody>
</table>

2. Hazards Identification

Emergency overview
CAUTION
Harmful if swallowed or absorbed through the skin. Avoid contact with skin, eyes and clothing.

Potential short term health effects

<table>
<thead>
<tr>
<th>Routes of exposure</th>
<th>Eye, Skin contact, Skin absorption, Inhalation, Ingestion.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eyes</td>
<td>May cause temporary irritation, tearing, and blurred vision. Mildly irritating, conjunctival redness clears by 24 hours. (rabbit)</td>
</tr>
<tr>
<td>Skin</td>
<td>Can cause skin irritation. Can cause a burning or pricking sensation on more sensitive areas (face, eyes, mouth). Harmful if absorbed through the skin. Slight irritation at 72 hours. Primary irritation Index = 1.4.</td>
</tr>
<tr>
<td>Inhalation</td>
<td>Excessive inhalation may be irritating to the respiratory tract. The Acute Inhalation LC50 of this material places it in EPA Toxic Category IV.</td>
</tr>
<tr>
<td>Ingestion</td>
<td>Harmful if swallowed.</td>
</tr>
</tbody>
</table>

Target organs: Eyes. Skin.

Chronic effects: None known.

Signs and symptoms: May cause irritation.

3. Composition / Information on Ingredients

<table>
<thead>
<tr>
<th>Ingredient(s)</th>
<th>CAS #</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Esfenvalerate</td>
<td>66230-04-4</td>
<td>0.025</td>
</tr>
</tbody>
</table>

Composition comments: Ingredients not identified are proprietary or non-hazardous. Values are not product specifications.

4. First Aid Measures

First aid procedures

<table>
<thead>
<tr>
<th>Eye contact</th>
<th>Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skin contact</td>
<td>Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.</td>
</tr>
<tr>
<td>Inhalation</td>
<td>Remove affected person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or doctor for further treatment advice.</td>
</tr>
</tbody>
</table>
5. Fire Fighting Measures

Flammable properties
Not flammable by OSHA criteria.

Extinguishing media
Suitable extinguishing media

Unsuitable extinguishing media
Not available

Protection of firefighters
Specific hazards arising from the chemical
Not available

Protective equipment for firefighters
Firefighters should wear full protective clothing including self contained breathing apparatus. Keep nearby containers and equipment cool with a water stream.

Hazardous combustion products
Under fire conditions this product may support combustion and may decompose to give off toxic gases such as HYDROGEN CYANIDE, carbon monoxide, carbon dioxide and nitrogen oxides.

Explosion data
Sensitivity to mechanical impact
Not available

Sensitivity to static discharge
Not available

6. Accidental Release Measures

Personal precautions
Keep unnecessary personnel away. Do not touch or walk through spilled material. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep people away from and upwind of spill/leak.

Methods for containment
Stop leak if you can do so without risk. Prevent entry into waterways, sewers, basements or confined areas.

Methods for cleaning up
SMALL SPILL: Stop release, if possible without risk. Dike or contain release, if possible, and if immediate response can prevent further damage or danger. Isolate and control access to the release area. Take actions to reduce vapors. Absorb with appropriate absorbent such as sand, or vermiculite. Clean spill area of residues and absorbent.

LARGE SPILL: Stop release, if possible without risk. Dike or contain release, if possible, and if immediate response can prevent further damage or danger. Isolate and control access to the release area. Take actions to reduce vapors. Collect product into drums, storage tanks, etc., via drains, pumps, etc. Absorb with appropriate absorbent such as sand or vermiculite. Clean spill area of residues and absorbent.

7. Handling and Storage

Handling
Take prudent precautions to avoid contact with skin, eyes, and clothing. Mechanical ventilation should be used when handling this product in enclosed spaces. Avoid breathing vapors or spray mists of this product. Wearing a respirator is not normally required when handling this product, but recommended in the absence of proper mechanical ventilation. Do not contaminate water, food or feedstuffs, by storage, handling or by disposal. Read and observe all precautions and instructions on the label.

Storage
Store containers upright and closed. Store in areas that are cool, dry and well-ventilated. DO NOT allow product to exceed 160°F (71.1°C) as HYDROGEN CYANIDE GAS may be produced. Keep away from strong acids, bases and oxidizers. Emptied container may retain product residues.
8. Exposure Controls / Personal Protection

<table>
<thead>
<tr>
<th>Ingredient(s)</th>
<th>Exposure Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Esfenvalerate</td>
<td>ACGIH-TLV, OSHA-PEL</td>
</tr>
<tr>
<td></td>
<td>Not established</td>
</tr>
<tr>
<td></td>
<td>Supplier OEL</td>
</tr>
<tr>
<td></td>
<td>2 mg/m³</td>
</tr>
</tbody>
</table>

**Engineering controls**

Mechanical ventilation should be used when handling this product in enclosed spaces. Local exhaust ventilation may be necessary.

**Personal protective equipment**

- **Eye / face protection**: Take prudent precautions to avoid contact with eyes.
- **Hand protection**: Take prudent precautions to avoid contact with skin and clothing.
- **Skin and body protection**: As required by employer code.
- **Respiratory protection**: Wearing a respirator is not normally required when handling this product. Use in well ventilated areas. Take prudent precautions to avoid breathing vapors and/or spray mists of this product.
- **General hygiene considerations**: DO NOT SMOKE, EAT, OR DRINK, OR APPLY COSMETICS IN WORK AREA! Wash promptly if skin becomes contaminated. Wash at the end of each work shift and before eating, smoking, or using the toilet.

9. Physical & Chemical Properties

- **Appearance**: Liquid.
- **Color**: 1.0 on Gardner Scale
- **Form**: Not available
- **Odor**: Slight sweet
- **Odor threshold**: Not available
- **Physical state**: Liquid
- **pH**: 6.4 @ 10% in water
- **Freezing point**: Not determined
- **Boiling point**: Not determined
- **Flash point**: > 93.3 °C (> 199.94 °F) Tag Closed Cup
- **Evaporation rate**: Not available
- **Flammability limits in air, lower, % by volume**: Not available
- **Flammability limits in air, upper, % by volume**: Not available
- **Vapor pressure**: Not available
- **Vapor density**: Heavier than air
- **Specific gravity**: 0.999 (Water=1) at 20°C (68°F)
- **Octanol/water coefficient**: Not available
- **Solubility (H2O)**: Miscible
- **Auto-ignition temperature**: Not available
- **VOC (Weight %)**: <1.000%
- **Pour point**: Not available
- **Viscosity**: 6CPS at 22.6°C (72.7°F) Brookfield
- **Percent volatile**: Not available

10. Chemical Stability & Reactivity Information

- **Chemical stability**: Stable under recommended storage conditions.
- **Conditions to avoid**: Do not mix with other chemicals.
- **Hazardous decomposition products**: HYDROGEN CYANIDE GAS may be formed by thermal decomposition at 160°F (71.1°C) or higher, or by contact with alkaline substances such as soda ash & lye.
- **Possibility of hazardous reactions**: None known.
11. Toxicological Information

Some of all of the toxicity data reported was bridged from a substantially similar formula.
Acute LD50: >1500 mg/kg, Albino Rat, Oral
Acute LD50: >2000 mg/kg, Albino Rabbit, Dermal

Component analysis - LC50

<table>
<thead>
<tr>
<th>Ingredient(s)</th>
<th>LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Esfenvalerate</td>
<td>Not available</td>
</tr>
</tbody>
</table>

Component analysis - Oral LD50

<table>
<thead>
<tr>
<th>Ingredient(s)</th>
<th>LD50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Esfenvalerate</td>
<td>325 mg/kg rat</td>
</tr>
</tbody>
</table>

Effects of acute exposure

| Eye | May cause temporary irritation, tearing, and blurred vision. Mildly irritating, conjunctival redness clears by 24 hours. (rabbit) |
| Skin | Can cause skin irritation. Can cause a burning or prickling sensation on more sensitive areas (face, eyes, mouth). Harmful if absorbed through the skin. Slight irritation at 72 hours. Primary irritation Index = 1.4. |
| Inhalation | Excessive inhalation may be irritating to the respiratory tract. The Acute Inhalation LC50 of this material places it in EPA Toxic Category IV. |
| Ingestion | Harmful if swallowed. |

Sensitization

When applied dermally to albino guinea pigs, this product does not appear to be a dermal sensitizer.

Chronic effects

Non-hazardous by OSHA criteria.

Carcinogenicity

None of the components present in this material at concentrations equal to or greater than 0.1% are listed by IARC, NTP, OSHA or ACGIH as being carcinogens.

Mutagenicity

Non-hazardous by OSHA criteria.

Reproductive effects

Non-hazardous by OSHA criteria.

Teratogenicity

Non-hazardous by OSHA criteria.

12. Ecological Information

Ecotoxicity

This pesticide is extremely toxic to fish. Do not apply directly to water. Do not contaminate water when disposing of equipment wash waters or rinsate. Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated areas. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans or other waters, unless in accordance with the requirement of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product into sewer systems without previously notifying the local sewage treatment plant authority. For guidance, contact your State Water Board or Regional Office of the EPA.

Environmental effects

Environmental data not available for this product.

Aquatic toxicity | Not available
Persistence / degradability | Not available
Bioaccumulation / accumulation | Not available
Partition coefficient | Not available
Mobility in environmental media | Not available
Chemical fate information | Not available

13. Disposal Considerations

Waste codes | Not available
Disposal instructions

IF EMPTY: Do not reuse this container. Place in trash or offer for recycling if available.
IF PARTLY FILLED: Call your local solid waste agency or 1-800-CLEAN-UP for disposal instructions. Never place unused product down any indoor or outdoor drain.
RCRA/EPA WASTE INFORMATION: None of the ingredients in this product appear on the RCRA lists (40 CFR 261.24, 40 CFR 251.33) or CERCLA Hazardous Substance list (40CFR Part 302 Table 302.4).

Waste from residues / unused products | Not available
Contaminated packaging | Not available
14. Transport Information

Department of Transportation (DOT)
- **Proper Shipping Name:** Insecticides, Insect or Animal Repellent, Liquid, N.O.S.
- **Primary Hazard Class/Division:** Non-Hazardous
- **Other Shipping Information:** This material is not regulated by the DOT as a hazardous material when shipping in Non-Bulk Quantities.

IATA
- **Proper Shipping Name:** Insecticides, Insect or Animal Repellent, Liquid, N.O.S.
- **Primary Hazard Class/Division:** Non-Hazardous

IMDG
- **Proper Shipping Name:** Not available.

15. Regulatory Information

**US Federal regulations**
- This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
- EPA registration number 1021-1779-2517

**Occupational Safety and Health Administration (OSHA)**
- 29 CFR 1910.1200 hazardous chemical: No

**CERCLA (Superfund) reportable quantity**
- This product contains no SARA Title III Section 313 chemicals that exceed the reporting limits.

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**
- **Hazard categories**
  - Immediate Hazard - Yes
  - Delayed Hazard - No
  - Fire Hazard - No
  - Pressure Hazard - No
  - Reactivity Hazard - No
- **Section 302 extremely hazardous substance**
  - There are no SARA Title III Section 302 extremely hazardous substances present in this formulation (40CFR 355).
- **Section 311 hazardous chemical**
  - Yes

**Clean Air Act (CAA)**
- Not available

**Clean Water Act (CWA)**
- Not available

**Safe Drinking Water Act (SDWA)**
- Not available

**Drug Enforcement Agency (DEA)**
- Not available

**Food and Drug Administration (FDA)**
- Not available

**Inventory status**
- **Country(s) or region**
  - United States & Puerto Rico
- **Inventory name**
  - Toxic Substances Control Act (TSCA) Inventory
- **On inventory (yes/no)**
  - Yes

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

**State regulations**
- This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.
- VOLATILE ORGANIC COMPOUNDS (VOC): This product contains less than 1% VOC's.

16. Other Information

**Disclaimer**
- Information contained herein was obtained from sources considered technically accurate and reliable. While every effort has been made to ensure full disclosure of product hazards, in some cases data is not available and is so stated. Since conditions of actual product use are beyond control of the supplier, it is assumed that users of this material have been fully trained according to the requirements of all applicable legislation and regulatory instruments. No warranty, expressed or implied, is made and supplier will not be liable for any losses, injuries or consequential damages which may result from the use of or reliance on any information contained in this document.

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**Effective date**
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**Prepared by**
- Regulatory Service  (1-402-938-7065)