1. Product and Company Identification

Product Name: Sergeant's Green brand Natural Flea & Tick Spray for Cats & Kittens

CAS #: Mixture

Product use: Kills and repels fleas, ticks & mosquitos

Manufacturer: Sergeant's Pet Care Products, Inc.
2625 South 158th Plaza
Omaha, NE 68130-1770 US
Phone: 1-800-224-7387
Fax: 1-402-938-7099
Emergency Phone: 1-800-781-4738

CHEMTREC: 1-800-424-9300

2. Hazards Identification

CAUTION
Flammable liquid - may release vapors that form flammable mixtures at or above the flash point. Containers may explode when heated.
May cause sensitization by skin contact.
Avoid contact with eyes. Avoid breathing mists or vapors. Wash thoroughly with soap and water after handling.
Do not use on (or cause exposure to) puppies under 12 weeks of age.

Potential short term health effects

Routes of exposure
Eye, Skin contact, Skin absorption, Inhalation, Ingestion.

Eyes
Causes irritation.

Skin
Contact with skin can cause irritation and allergic reaction (sensitization) in some individuals. May be absorbed through the skin.

Inhalation
Harmful if inhaled. May cause respiratory tract irritation.

Ingestion
May cause stomach distress, nausea or vomiting.

Target organs
Eyes. Skin. Respiratory system.

Chronic effects
Prolonged or repeated exposure can cause drying, defatting and dermatitis.

Signs and symptoms
Symptoms may include redness, edema, drying, defatting and cracking of the skin.
Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.

3. Composition / Information on Ingredients

<table>
<thead>
<tr>
<th>Ingredient(s)</th>
<th>CAS #</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-Propanol</td>
<td>67-63-0</td>
<td>20 - 40</td>
</tr>
<tr>
<td>Oils of cinnamon</td>
<td>8007-80-5</td>
<td>1 - 2.5</td>
</tr>
<tr>
<td>Oils, clove</td>
<td>8000-34-8</td>
<td>1 - 2.5</td>
</tr>
<tr>
<td>Oils, lemongrass</td>
<td>8007-02-1</td>
<td>1 - 2.5</td>
</tr>
<tr>
<td>Oils, thyme</td>
<td>8007-46-3</td>
<td>1 - 2.5</td>
</tr>
<tr>
<td>Oils, peppermint</td>
<td>8006-90-4</td>
<td>0.1 - 1</td>
</tr>
</tbody>
</table>
4. First Aid Measures

First aid procedures

- **Eye contact**: 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.

- **Skin contact**: Flush with cool water. Wash with soap and water. Obtain medical attention if irritation persists.

- **Inhalation**: 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.

- **Ingestion**: Do not induce vomiting. Rinse mouth with water, then drink one or two glasses of water. Obtain medical attention. Never give anything by mouth if victim is unconscious, or is convulsing.

Notes to physician

Symptoms may be delayed.

General advice

Keep away from sources of ignition. No smoking. If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Avoid contact with eyes and skin. Keep out of reach of children.

5. Fire Fighting Measures

- **Flammable properties**: Flammable by OSHA criteria. Vapors may travel to a source of ignition and flash back. Containers may explode when heated.

- **Extinguishing media**
  - Suitable extinguishing media: Carbon dioxide. Alcohol foam. Dry chemical.
  - 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.

- **Hazardous combustion products**: May include and are not limited to: Oxides of carbon.

- **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**: Before attempting clean up, refer to hazard data given above. Small spills may be absorbed with non-reactive absorbent and placed in suitable, covered, labelled containers. Prevent large spills from entering sewers or waterways. Contact emergency services and supplier for advice. Never return spills in original containers for re-use.

7. Handling and Storage

- **Handling**: Use good industrial hygiene practices in handling this material.

- **Storage**: Keep out of reach of children. Store in a closed container away from incompatible materials. Keep away from heat, open flames or other sources of ignition.
## 8. Exposure Controls / Personal Protection

<table>
<thead>
<tr>
<th>Exposure limits</th>
<th>Exposure Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ingredient(s)</strong></td>
<td><strong>ACGIH-TLV</strong></td>
</tr>
<tr>
<td>2-Propanol</td>
<td>TWA: 200 ppm</td>
</tr>
<tr>
<td></td>
<td>STEL: 400 ppm</td>
</tr>
<tr>
<td>Oils of cinnamon</td>
<td>Not established</td>
</tr>
<tr>
<td>Oils, clove</td>
<td>Not established</td>
</tr>
<tr>
<td>Oils, lemongrass</td>
<td>ACGIH-TLV</td>
</tr>
<tr>
<td></td>
<td>Mist: 5 mg/m³</td>
</tr>
<tr>
<td>Oils, peppermint</td>
<td>Not established</td>
</tr>
<tr>
<td>Oils, thyme</td>
<td>Not established</td>
</tr>
</tbody>
</table>

### Engineering controls
Use only under good ventilation conditions or with respiratory protection.

### Personal protective equipment
- **Eye / face protection**: Wear safety glasses with side shields.
- **Hand protection**: Rubber gloves. Confirm with a reputable supplier first.
- **Skin and body protection**: As required by employer code.
- **Respiratory protection**: Where exposure guideline levels may be exceeded, use an approved NIOSH respirator.
- **General hygiene considerations**: Handle in accordance with good industrial hygiene and safety practice. When using do not eat or drink. Wash hands before breaks and immediately after handling the product.

## 9. Physical & Chemical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Appearance</strong></td>
<td>Clear</td>
</tr>
<tr>
<td><strong>Color</strong></td>
<td>Colorless</td>
</tr>
<tr>
<td><strong>Form</strong></td>
<td>Liquid</td>
</tr>
<tr>
<td><strong>Odor</strong></td>
<td>Citrus. / minty</td>
</tr>
<tr>
<td><strong>Odor threshold</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>Physical state</strong></td>
<td>Liquid</td>
</tr>
<tr>
<td><strong>pH</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>Melting point</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>Freezing point</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>Boiling point</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>Flash point</strong></td>
<td>21.11 °C (70 °F) Tag Closed Cup</td>
</tr>
</tbody>
</table>
10. Chemical Stability & Reactivity Information

Chemical stability
Stable under recommended storage conditions.

Conditions to avoid
Avoid high temperatures. Do not mix with other chemicals.

Incompatible materials

Hazardous decomposition products
May include and are not limited to: Oxides of carbon.

Possibility of hazardous reactions
Hazardous polymerization does not occur.

11. Toxicological Information

Component analysis - LC50

<table>
<thead>
<tr>
<th>Ingredient(s)</th>
<th>LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-Propanol</td>
<td>16970 mg/l/4h rat</td>
</tr>
<tr>
<td>Oils of cinnamon</td>
<td>Not available</td>
</tr>
<tr>
<td>Oils, clove</td>
<td>Not available</td>
</tr>
<tr>
<td>Oils, lemongrass</td>
<td>Not available</td>
</tr>
<tr>
<td>Oils, peppermint</td>
<td>Not available</td>
</tr>
<tr>
<td>Oils, thyme</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>2-Propanol</td>
<td>4396 mg/kg rat</td>
</tr>
<tr>
<td>Oils of cinnamon</td>
<td>2800 mg/kg rat</td>
</tr>
<tr>
<td>Oils, clove</td>
<td>2650 mg/kg rat</td>
</tr>
<tr>
<td>Oils, lemongrass</td>
<td>&gt; 5000 mg/kg rat</td>
</tr>
<tr>
<td>Oils, peppermint</td>
<td>2426 mg/kg rat</td>
</tr>
<tr>
<td>Oils, thyme</td>
<td>2840 mg/kg rat</td>
</tr>
</tbody>
</table>

Effects of acute exposure

- **Eye**: Causes irritation.
- **Skin**: Contact with skin can cause irritation and allergic reaction (sensitization) in some individuals. May be absorbed through the skin.
- **Inhalation**: Harmful if inhaled. May cause respiratory tract irritation.
- **Ingestion**: May cause stomach distress, nausea or vomiting.
- **Sensitization**: Contains potential skin sensitizers.
- **Chronic effects**: Non-hazardous by OSHA criteria.
Carcinogenicity
ACGIH - Threshold Limits Values - Carcinogens
2-Propanol 67-63-0 A4 - Not Classifiable as a Human Carcinogen
IARC - Group 3 (Not Classifiable)
2-Propanol 67-63-0 Monograph 71 [1999], Supplement 7 [1987], Monograph 15 [1977]

Mutagenicity
Non-hazardous by OSHA criteria.

Reproductive effects
Non-hazardous by OSHA criteria.

Teratogenicity
Non-hazardous by OSHA criteria.

12. Ecological Information

Ecotoxicity
Components of this product have been identified as having potential environmental concerns.

Ecotoxicity - Freshwater Algae Data
2-Propanol 67-63-0 96 Hr EC50 Scenedesmus subspicatus: >1000 mg/L; 72 Hr EC50 Scenedesmus subspicatus: >1000 mg/L

Ecotoxicity - Freshwater Fish Species Data
2-Propanol 67-63-0 96 Hr LC50 Pimephales promelas: 9640 mg/L [flow-through]; 96 Hr LC50 Pimephales promelas: 94900 mg/L [flow-through] (29 days old); 96 Hr LC50 Pimephales promelas: 61200 mg/L [flow-through] (31 days old)

Ecotoxicity - Microtox Data
2-Propanol 67-63-0 5 Min EC50 Photobacterium phosphoreum: 35390 mg/L

Ecotoxicity - Water Flea Data
2-Propanol 67-63-0 48 Hr EC50 Daphnia magna: 13299 mg/L

Environmental effects Not available
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 Review federal, provincial, and local government requirements prior to disposal.
Waste from residues / unused products Not available
Contaminated packaging Not available

14. Transport Information

Department of Transportation (DOT)
Basic shipping requirements: Flammable liquids, n.o.s. (2-PROPANOL)
Proper shipping name
Hazard class 3
UN number UN1993
Packing group II
Additional information:
Special provisions IB2, T7, TP1, TP8, TP28
Packaging exceptions 150
ERG number 128
15. Regulatory Information

### US Federal regulations
This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
Sergeant’s Pet Care Products, Inc. represents that this product qualifies for exemption from registration under the Federal Insecticide Fungicide, and Rodenticide Act (FIFRA).
This product has not been registered by the United States Environmental Protection Agency. (EPA Exemption number 25B-36)
All components are on the U.S. EPA TSCA Inventory List.

CERCLA/SARA Hazardous Substances - Not applicable.

#### 2-Propanol 67-63-0 - Emission Reporting
- **1.0 % de minimis concentration (only if manufactured by the strong acid process, no supplier notification)**

#### Occupational Safety and Health Administration (OSHA)
- **29 CFR 1910.1200 hazardous chemical**
  - Yes

#### CERCLA (Superfund) reportable quantity
- None

#### Superfund Amendments and Reauthorization Act of 1986 (SARA)
- **Hazard categories**
  - Immediate Hazard - Yes
  - Delayed Hazard - Yes
  - Fire Hazard - Yes
  - Pressure Hazard - No
  - Reactivity Hazard - No
- **Section 302 extremely hazardous substance**
  - No
- **Section 311 hazardous chemical**
  - Yes

### Regulatory Information

#### 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

<table>
<thead>
<tr>
<th>Country(s) or region</th>
<th>Inventory name</th>
<th>On inventory (yes/no)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States &amp; Puerto Rico</td>
<td>Toxic Substances Control Act (TSCA) Inventory</td>
<td>Yes</td>
</tr>
</tbody>
</table>

*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.

- **U.S. - California - 8 CCR Section 339 - Director's List of Hazardous Substances**
  - 2-Propanol 67-63-0 Present
- **U.S. - Massachusetts - Right To Know List**
  - 2-Propanol 67-63-0 Present
- **U.S. - Minnesota - Hazardous Substance List**
  - 2-Propanol 67-63-0 Present
- **U.S. - New Jersey - Right to Know Hazardous Substance List**
  - 2-Propanol 67-63-0 sn 1076; sn 2381 (strong-acid process manufacture)
- **U.S. - Pennsylvania - RTK (Right to Know) List**
  - 2-Propanol 67-63-0 Environmental hazard
- **U.S. - Rhode Island - Hazardous Substance List**
  - 2-Propanol 67-63-0 Toxic; Flammable
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.

Issue date 11-Sept-2009
Effective date 11-Sept-2009
Prepared by Dell Tech Laboratories Ltd. (519) 858-5021