

**1. Product and Company Identification**

**Product Name** Sentry Natural Defense Natural Flea & Tick Squeeze-On for Dogs & Puppies  
**Synonym(s)** For dogs and puppies under 15 lbs, 15-40 lbs, over 40 lbs, all weights  
**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  
 1-800-424-9300

**CHEMTREC**

LEGEND HMIS	
Severe	4
Serious	3
Moderate	2
Slight	1
Minimal	0

Health	* 2
Flammability	1
Physical Hazard	0
Personal Protection	B

**2. Hazards Identification**

**Emergency overview** CAUTION  
 Hazards to humans and domestic animals.  
 Avoid contact with eyes. Wash thoroughly with soap and water after handling.  
 May cause sensitization by skin contact.  
**EYE AND SKIN IRRITANT.**  
 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** 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**

Ingredient(s)	CAS #	Percent
Oils of cinnamon	8007-80-5	2.5 - 10
Oils, clove	8000-34-8	2.5 - 10
Oils, lemongrass	8007-02-1	2.5 - 10
Oils, peppermint	8006-90-4	2.5 - 10
Oils, thyme	8007-46-3	2.5 - 10
Benzaldehyde, 4-hydroxy-3-methoxy-	121-33-5	1 - 2.5

---

## 4. First Aid Measures

---

### First aid procedures

<b>Eye contact</b>	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.
<b>Skin contact</b>	Flush with cool water. Wash with soap and water. Obtain medical attention if irritation persists.
<b>Inhalation</b>	If symptoms develop move victim to fresh air. If symptoms persist, obtain medical attention.
<b>Ingestion</b>	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

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

Not flammable by OSHA criteria.

### Extinguishing media

**Suitable extinguishing media** Dry chemical. Foam. Carbon dioxide. Fog.

**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.

---

## 8. Exposure Controls / Personal Protection

### Exposure limits

Ingredient(s)	Exposure Limits
Benzaldehyde, 4-hydroxy-3-methoxy-	<b>ACGIH-TLV</b> Not established <b>OSHA-PEL</b> Not established
Oils of cinnamon	<b>ACGIH-TLV</b> Not established <b>OSHA-PEL</b> Not established
Oils, clove	<b>ACGIH-TLV</b> Not established <b>OSHA-PEL</b> Not established
Oils, lemongrass	<b>ACGIH-TLV</b> Mist: 5 mg/m <sup>3</sup> <b>OSHA-PEL</b> Not established
Oils, peppermint	<b>ACGIH-TLV</b> Not established <b>OSHA-PEL</b> Not established
Oils, thyme	<b>ACGIH-TLV</b> Not established <b>OSHA-PEL</b> Not established

### Engineering controls

General ventilation normally adequate.

### 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

<b>Appearance</b>	Clear.
<b>Color</b>	Colorless
<b>Form</b>	Liquid
<b>Odor</b>	Citrus. / minty
<b>Odor threshold</b>	Not available
<b>Physical state</b>	Liquid
<b>pH</b>	Not available
<b>Melting point</b>	Not available
<b>Freezing point</b>	Not available
<b>Boiling point</b>	Not available
<b>Flash point</b>	141.66 °C (287 °F) (calculated)
<b>Evaporation rate</b>	Not available

<b>Flammability limits in air, lower, % by volume</b>	Not available
<b>Flammability limits in air, upper, % by volume</b>	Not available
<b>Vapor pressure</b>	Not available
<b>Vapor density</b>	Not available
<b>Specific gravity</b>	0.88 (@ 70°F)
<b>Octanol/water coefficient</b>	Not available
<b>Solubility (H2O)</b>	Negligible
<b>Auto-ignition temperature</b>	Not available
<b>Viscosity</b>	Not available
<b>Percent volatile</b>	Not available

---

## 10. Chemical Stability & Reactivity Information

---

<b>Chemical stability</b>	Stable under recommended storage conditions.
<b>Conditions to avoid</b>	Do not mix with other chemicals.
<b>Incompatible materials</b>	Acids. Oxidizers. Caustics. Reducing agents.
<b>Hazardous decomposition products</b>	May include and are not limited to: Oxides of carbon.
<b>Possibility of hazardous reactions</b>	Hazardous polymerization does not occur.

---

## 11. Toxicological Information

---

### Component analysis - LC50

Ingredient(s)	LC50
Benzaldehyde, 4-hydroxy-3-methoxy-	Not available
Oils of cinnamon	Not available
Oils, clove	Not available
Oils, lemongrass	Not available
Oils, peppermint	Not available
Oils, thyme	Not available

### Component analysis - Oral LD50

Ingredient(s)	LD50
Benzaldehyde, 4-hydroxy-3-methoxy-	1580 mg/kg rat
Oils of cinnamon	2800 mg/kg rat
Oils, clove	2650 mg/kg rat
Oils, lemongrass	> 5000 mg/kg rat
Oils, peppermint	2426 mg/kg rat
Oils, thyme	2840 mg/kg rat

### Effects of acute exposure

<b>Eye</b>	Causes irritation.
<b>Skin</b>	Contact with skin can cause irritation and allergic reaction (sensitization) in some individuals. May be absorbed through the skin.
<b>Inhalation</b>	May cause respiratory tract irritation.
<b>Ingestion</b>	May cause stomach distress, nausea or vomiting.
<b>Sensitization</b>	Contains potential skin sensitizers.
<b>Chronic effects</b>	Non-hazardous by OSHA criteria.
<b>Carcinogenicity</b>	Non-hazardous by OSHA criteria.
<b>Mutagenicity</b>	Non-hazardous by OSHA criteria.
<b>Reproductive effects</b>	Non-hazardous by OSHA criteria.
<b>Teratogenicity</b>	Non-hazardous by OSHA criteria.

---

## 12. Ecological Information

---

<b>Ecotoxicity</b>	Components of this product have been identified as having potential environmental concerns.	
<b>Ecotoxicity - Freshwater Fish Species Data</b>		
Benzaldehyde, 4-hydroxy-3-methoxy-	121-33-5	96 Hr LC50 Pimephales promelas: 57 mg/L [flow-through]
<b>Ecotoxicity - Microtox Data</b>		
Benzaldehyde, 4-hydroxy-3-methoxy-	121-33-5	210 Min EC50 Saccharomyces cerevisiae: 179 mg/L
<b>Ecotoxicity - Water Flea Data</b>		
Benzaldehyde, 4-hydroxy-3-methoxy-	121-33-5	24 Hr EC50 Daphnia magna: 180 mg/L
<b>Environmental effects</b>	Not available	
<b>Aquatic toxicity</b>	Not available	
<b>Persistence / degradability</b>	Not available	
<b>Bioaccumulation / accumulation</b>	Not available	
<b>Partition coefficient</b>	Not available	
<b>Mobility in environmental media</b>	Not available	
<b>Chemical fate information</b>	Not available	

---

## 13. Disposal Considerations

---

<b>Waste codes</b>	Not available
<b>Disposal instructions</b>	Review federal, provincial, and local government requirements prior to disposal.
<b>Waste from residues / unused products</b>	Not available
<b>Contaminated packaging</b>	Not available

---

## 14. Transport Information

---

**Department of Transportation (DOT)**  
Not regulated as dangerous goods.

---

## 15. Regulatory Information

---

<b>US Federal regulations</b>	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 numbers 25B-2A /3A /4A. All components are on the U.S. EPA TSCA Inventory List.	
	CERCLA/SARA Hazardous Substances - Not applicable.	
<b>Occupational Safety and Health Administration (OSHA)</b>		
29 CFR 1910.1200 hazardous chemical	Yes	
<b>CERCLA (Superfund) reportable quantity</b>	None	
<b>Superfund Amendments and Reauthorization Act of 1986 (SARA)</b>		
<b>Hazard categories</b>	Immediate Hazard - Yes Delayed Hazard - Yes Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No	
<b>Section 302 extremely hazardous substance</b>	No	
<b>Section 311 hazardous chemical</b>	Yes	
<b>Clean Air Act (CAA)</b>	Not available	
<b>Clean Water Act (CWA)</b>	Not available	

---

**Safe Drinking Water Act (SDWA)** Not available  
**Drug Enforcement Agency (DEA)** Not available  
**Food and Drug Administration (FDA)** Not available

**Inventory status**

<b>Country(s) or region</b>	<b>Inventory name</b>	<b>On inventory (yes/no)*</b>
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	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.

---

## 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-Mar-2008

**Effective date**

01-Mar-2008

**Prepared by**

Dell Tech Laboratories Ltd. (519) 858-5021