

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
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

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

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	If symptoms develop move victim to fresh air. If symptoms persist, obtain medical attention.
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

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-	ACGIH-TLV Not established OSHA-PEL Not established
Oils of cinnamon	ACGIH-TLV Not established OSHA-PEL Not established
Oils, clove	ACGIH-TLV Not established OSHA-PEL Not established
Oils, lemongrass	ACGIH-TLV Mist: 5 mg/m ³ OSHA-PEL Not established
Oils, peppermint	ACGIH-TLV Not established OSHA-PEL Not established
Oils, thyme	ACGIH-TLV Not established OSHA-PEL 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

Appearance	Clear.
Color	Colorless
Form	Liquid
Odor	Citrus. / minty
Odor threshold	Not available
Physical state	Liquid
pH	Not available
Melting point	Not available
Freezing point	Not available
Boiling point	Not available
Flash point	141.66 °C (287 °F) (calculated)
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	Not available
Specific gravity	0.88 (@ 70°F)
Octanol/water coefficient	Not available
Solubility (H2O)	Negligible
Auto-ignition temperature	Not available
Viscosity	Not available
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.
Incompatible materials	Acids. Oxidizers. Caustics. Reducing agents.
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

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

Eye	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.
Sensitization	Contains potential skin sensitizers.
Chronic effects	Non-hazardous by OSHA criteria.
Carcinogenicity	Non-hazardous by OSHA criteria.
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 Fish Species Data		
Benzaldehyde, 4-hydroxy-3-methoxy-	121-33-5	96 Hr LC50 Pimephales promelas: 57 mg/L [flow-through]
Ecotoxicity - Microtox Data		
Benzaldehyde, 4-hydroxy-3-methoxy-	121-33-5	210 Min EC50 Saccharomyces cerevisiae: 179 mg/L
Ecotoxicity - Water Flea Data		
Benzaldehyde, 4-hydroxy-3-methoxy-	121-33-5	24 Hr EC50 Daphnia magna: 180 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)
Not regulated as dangerous goods.

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 numbers 25B-2A /3A /4A. All components are on the U.S. EPA TSCA Inventory List.	
	CERCLA/SARA Hazardous Substances - Not applicable.	
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 - No Pressure Hazard - No Reactivity Hazard - No	
Section 302 extremely hazardous substance	No	
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	Inventory name	On inventory (yes/no)*
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.

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Prepared by

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