MATERIAL SAFETY DATA SHEET

SECTION 1. Product and Company Identification BIO SPOT Flea & Tick Control For DOGS

Product Code: 270-278, Reference #: 2139

Product Name: BIO SPOT Flea & Tick Control For DOGS Synonyms

FARNAM TICK HALT! SPOT-ON FOR DOGS

Manufacturer Name and Address:		Telephone Numbers:	Dates:
Distributed by:	CHEMTREC	(800)424-9300	Date Created: 04/25/1996
Farnam Companies, Inc.	District of Columbia	(202)483-0414	Revision: 04/26/2007
301 West Osborn Road Phoenix, AZ.	Farnam Companies, In	n (800)234-2269	Printed: 04/26/2007
r nocina, AL.			

SECTION 2. Composition/Information on Ingredients BIO SPOT Flea & Tick Control For DOGS

	Hazardous Components (Chemical Name)		CAS#	Concentration
1.	Permethrin {Cyclopropanecarboxylic acid, 3-(2,2-Dichloroethenyl)-2,2-dimethylcyclopropane carbolic		52645-53-1	45.0 %
2.	2. Pyriproxyfen (NYLAR/BIOLAR)		95737-68-1	5.0 %
3.	(R)-1-Methyl-4-(1-methylethenyl)-cyclohexene {(R)-(+)-Limonene}		5989-27-5	30.55 %
	OSHA PEL	ACGIH TI	$\mathbb{L}\mathbf{V}$	
1.	No data.	No data.		
2.	No data.	No data.		
3.	No data.	No data.		

SECTION 3. Hazards Identification BIO SPOT Flea & Tick Control For DOGS

Emergency Overview

No data available.

Route(s) of Entry: Inhalation? Yes, Skin? Yes, Eyes? Yes, Ingestion? Yes

Potential Health Effects (Acute and Chronic)

No data available.

Carcinogenicity: NTP? No , IARC Monographs? No , OSHA Regulated? No

Carcinogenicity/Other Information

No data available. LD 50 / LC 50

Acute Oral LD 50=2,614 mg/kg male rats

Signs and Symptoms Of Exposure

May produce skin sensations (feelings of numbing and tingling) in certain individuals. Moderate eye irritant. May cause drying and irritation of skin. These sensations normally subside and disappear within a few hours. If ingested, the product may cause diarrhea, salivation, bloody nose, increased urination, decreased activity, tremors and intermittent convulsions. Excessive inhalation causes coughing headache, dizziness, nausea as well as nose, throat, and respiratory tract irritation.

Medical Conditions Generally Aggravated By Exposure

No data available.

SECTION 4. First Aid Measures BIO SPOT Flea & Tick Control For DOGS

Emergency and First Aid Procedures

IF INHALED: Quickly remove person from exposure. Call a physician if irritation persists.

IF INGESTED: Call a physician or Poison Control Center. Drink 1 or 2 glasses of water and induce vomiting by touching back of throat with finger or, if available, by administration of syrup of ipecac. DO NOT INDUCE VOMITING OR GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON.

IF ON SKIN: Remove contaminated clothing and wash with plenty of soap and water. Call a physician if irritation persists.

IF IN EYES: Flush eyes with plenty of water. Call a physician if irritation persists.

Note to Physician

No data available.

SECTION 5. Fire Fighting Measures BIO SPOT Flea & Tick Control For DOGS

Flash Pt: 132.00 F Method Used: Koehler Closed Cup Flash

Explosive Limits: LEL: No data. UEL: No data. **Autoignition Pt:** N.A. **Extinguishing Media**

Foam, carbon dioxide, dry chemical, or halogenated agents.

Fire Fighting Instructions

Fight fire from upwind. As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH approved or equivalent and full protective gear. Do not use water. Handle as an oil fire, class B fire procedures. Remove unignited product from fire area if possible. Dike fire control waters to prevent their entry into sewers or other water courses.

Flammable Properties and Hazards

Combustible Liquid. Keep away from heat, sparks, and open flame. Guard against spontaneous combustion or improperly discarded oily rags. Overheated containers are an explosion hazard. Vapors which form inside empty containers may also present an explosion hazard during a fire. Equipment used to fight pesticide fires may require decontamination before reuse.

Hazardous Combustion Products

No data available.

SECTION 6. Accidental Release Measures BIO SPOT Flea & Tick Control For DOGS

Steps To Be Taken In Case Material Is Released Or Spilled

Small Spills: Absorb with inert absorbent. Wash contaminated area with detergent and water solution. Discard in trash.

Large Spills (Bulk product only): Wear OSHA approved clean protective clothing, rubber gloves, and goggles. If vapor concentration becomes high, use self contained air mask (NIOSH approved). No smoking. Eliminate any source of ignition. Minimize inhalation. Recover free liquid by adding absorbent (earth, sawdust, kitty litter, etc.) to spill area. Shovel waste into a metal drum. Avoid contact with skin. Keep product out of sewers and water courses by diking or impounding. Advise authorities if product has entered or may enter sewers, watercourses or extensive land areas. CAUTION: SLIPPERY ON FLOOR. Following clean up of spilled liquid, wash contaminated area with detergent and water solution. Collect wash water in containers for disposal.

SECTION 7. Handling and Storage

BIO SPOT Flea & Tick Control For DOGS

Hazard Label Information:

hydrogen cyanide Lab coat and apron

Precautions To Be Taken in Handling

No data available.

Precautions To Be Taken in Storing

No data available.

Other Precautions

Harmful if swallowed or absorbed through the skin. Causes miderate eye irritation. Avoid contact with skin, eyes, or clothing. Wear goggles, face shield or safety glasses. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

SECTION 8. Exposure Controls/Personal Protection BIO SPOT Flea & Tick Control For DOGS

Respiratory Equipment (Specify Type)

For fires, use self-contained breathing apparatus only. For moderate vapor or liquid mist oxposure, use half mask or full face piece respirators which have NIOSH/MSHA approval for pesticides.

Eye Protection

Where potential for splashing exists, or contact with spray or mist is likely, protective goggles and face shield should be worn. A source of clean water for flushing should be nearby (i.e., emergency eye wash and shower stations).

Protective Gloves

Neoprene gloves for extended exposure.

Other Protective Clothing

Long sleeved coveralls or uniform, cap, rubber boots, rubber or plastic apron may be needed during formulation, packaging, or other handling of large amounts or product.

Engineering Controls (Ventilation etc.)

Local exhaust should be sufficient. If user operations generate fumes or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Work/Hygienic/Maintenance Practices

Wash thoroughly after use and before eating, smoking, or using restroom.

SECTION 9. Physical and Chemical Properties BIO SPOT Flea & Tick Control For DOGS

Physical States: [] Gas, [X] Liquid, [] Solid

Boiling Point:

Melting Point:

N.A.

N.A.

Specific Gravity (Water = 1):

Density:

No data.

Vapor Pressure (vs. Air or mm Hg): N.A. Vapor Density (vs. Air = 1): N.A. Evaporation Rate (vs Butyl Acetate=1): N.A.

Solubility in Water: Negligible

Percent Volatile:

Saturated Vapor Concentration:

Viscosity:

Programmed No.A.

No data.

No data.

No data.

Appearance and Odor

Amber colored solution with a distinct citrus odor.

SECTION 10. Stability and Reactivity BIO SPOT Flea & Tick Control For DOGS

Stability: Unstable [] Stable [X] **Conditions To Avoid - Instability**

Keep away from heat, sparks, open flame, and sources of ignition. Avoid excessive heat. Avoid polymerization catalyst, such as aluminum chloride or acidic clays.

Incompatibility - Materials To Avoid

Avoid heat, spards and open flame. Avoid contamination with high concentrations of alkali at elevated temperatures. Avoid strong oxidizing agents and acidic agents.

Hazardous Decomposition Or Byproducts

Burning can product carbon monoxide and/or carbon dioxide. Chlorine and hydrogen chloride may be formed. Smoke can be acrid and fume irritating.

Hazardous Polymerization: Will occur [] Will not occur [X]

Conditions To Avoid - Hazardous Polymerization

Product will not undergo polymerization.

SECTION 11. Toxicological Information BIO SPOT Flea & Tick Control For DOGS

No data available.

SECTION 12. Ecological Information BIO SPOT Flea & Tick Control For DOGS

No data available.

SECTION 13. Disposal Considerations BIO SPOT Flea & Tick Control For DOGS

Waste Disposal Method

Dispose of all pesticide waste according to local, State, and Federal regulations. Small amounts of waste may be securely wrapped in several layers of newspaper and discarded in trash. Do not reuse empty container. Wrap empty container and put in trash.

SECTION 14. Transport Information BIO SPOT Flea & Tick Control For DOGS

DOT Proper Shipping Name

No data available.

Additional Transport Information

Contains d-Limonene CAS # 5989-27-5

SECTION 15. Regulatory Information BIO SPOT Flea & Tick Control For DOGS

No data available.

SECTION 16. Other Information BIO SPOT Flea & Tick Control For DOGS

Supercedes Revision 11/27/2006

The Acute Oral LD 50 = 2,614 mg/kg male rats Acute Oral LD 50 = 1,660 mg/kg female rats Acute Dermal LD 50 > 5,050 mg/kg rabbits Primary Skin Irritation = 0.0Not a dermal irritant or sensitizer. Inhalation LC 50 >> 2.87 mg/liter Moderate eye irritant

The information and data herein are believed to be accurate and have been compiled from sources believed to be reliable. It is offered for your consideration, investigation and verification.