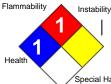
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# MATERIAL SAFETY DATA SHEET ADAMS FLEA & TICK SPOT ON FOR DOGS



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Date Created: 08/24/2011

			Special Hazar	Date Created: 08/24/2011			
1. Product and Company Identification							
Product Code:	2724-811-270						
Product Name:	ADAMS FLEA & TICK SPOT ON FOR DOGS						
Manufacturer Information							
Company Name:	Distributed by:						
	Farnam Comp	anies, Inc.					
	301 West Osborn Road						
	Phoenix, AZ						
Emergency Contact:	CHEMTREC		(800)424-93	00			
Alternate Emergency Contact:	District of Columbia		(202)483-041	4			
Information:	Farnam Companies, Inc.		(800)234-	2269			
Preparer Name:	SFaith		· · ·				
Additional Identity Information 100507388 (toy) 100507381 (small) 100507382 (medium) 100507384 (large) 100507386 (x-large)							
2. Com	position/In	formation	on Ingredi	ents			
Hazardous Components (Chemical Name)	CAS #	Concentration	OSHA PEL	ACGIH TLV			
<ol> <li>2,4-Dodecadienoic acid,</li> <li>11-methoxy-3,7,11-trimethyl-, 1-methylethyl ester, [S-(E,E)]-</li> </ol>	65733-16-6	3.6 %	No data.	No data.			
2. Etofenprox	80844-07-1	30.0 %	No data.	No data.			
3. Piperonyl butoxide	51-03-6	5.0 %	No data.	No data.			
3. Hazards Identification							
Emergency Overview KEEP OUT OF REACH OF CHILDREN CAUTION HAZARDS TO HUMANS AND DOMESTIC ANIMALS - CAUTION							

## HAZARDS TO HUMANS AND DOMESTIC ANIMALS - CAUTION

For external use only. Causes moderate eye irritation. Avoid contact with eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Repeated exposure to etofenprox can cause skin irritation.

Route(s) of Entry: Inhalation? N.A. Skin? Yes Eyes? Yes Ingestion? N.A.

## Potential Health Effects (Acute and Chronic)

No specific hazard identified.

### **Recommended Exposure Limits**

Not available

### Signs and Symptoms Of Exposure

Repeated exposure to etofenprox can cause skin irritation.

Mildly irritating to eyes.

Not a skin sensitizer.

#### Medical Conditions Generally Aggravated By Exposure

None known

## 4. First Aid Measures

#### **Emergency and First Aid Procedures**

IF IN EYES: 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. Call a poison control center or doctor for treatment advice.

#### **Note to Physician**

There is no specific antidote. Treatment of overexposure should be directed at the control of symptoms and the clinical condition.

	5. Fire Fighting Measures			
Flammability Classification:	Class IIIB liquid.			
Flash Pt:	135.90 C Method Used: I	Pensky-Marten Closed Cup		
Explosive Limits:	LEL: No data.	UEL: No data.		
Autoignition Pt:	NA			
Fire Fighting Instructions				

Firefighters should wear full protective clothing including self-contained breathing apparatus. Normal procedures. Do not allow fire fighting water to escape into water-ways or sewers.

### **Flammable Properties and Hazards**

No unusual fire/explosion hazards known.

#### **Hazardous Combustion Products**

Carbon dioxide and carbon monoxide.

#### **Extinguishing Media**

Water, CO2, dry chemicals, foam.

#### **Unsuitable Extinguishing Media**

None known

## 6. Accidental Release Measures

### Steps To Be Taken In Case Material Is Released Or Spilled

Do not allow spill to enter water ways or sewers. Soak up with absorbent material and place in a suitable container for disposal.

Absorbents: Clay granules, sawdust, dirt or equivalent.

# 7. Handling and Storage

#### **Precautions To Be Taken in Handling**

Avoid contact with skin, eyes, or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco. Remove and wash contaminated clothing before reuse.

#### **Precautions To Be Taken in Storing**

Store in a cool area away from heat or open flame. Store away from children and animals.

## 8. Exposure Controls/Personal Protection

#### **Respiratory Equipment (Specify Type)**

Not required under normal conditions

#### **Eye Protection**

If contact with liquid is anticipated, safety goggles are recommended.

#### **Protective Gloves**

If contact with liquid is anticipated, impervious gloves are recommended.

#### **Other Protective Clothing**

No data available.

#### **Engineering Controls (Ventilation etc.)**

Use with adequate ventilation.

#### Work/Hygienic/Maintenance Practices

Wash hands before eating, drinking, smoking, or using restroom.

9. Physical and Chemical Properties			
Physical States:	[]Gas	[ X ] Liquid	[ ] Solid
Melting Point:	NA		
Boiling Point:	NA		
Autoignition Pt:	NA		
Flash Pt:	135.90 C	Method Used:	Pensky-Marten Closed Cup
Specific Gravity (Water = 1):	0.994		
Density:	8.3 - lb/gal		
Vapor Pressure (vs. Air or mm Hg):	NA		
Vapor Density (vs. Air = 1):	NA		
Evaporation Rate (vs Butyl Acetate=1):	NA		
Solubility in Water:	No data.		
Solubility Notes			
Not soluble			
Percent Volatile:	N.A.		

#### Appearance and Odor

Oily, yellowish liquid with weak, neutral, chemical odor.

10. Stability and Reactivity						
Stability:	Unstable [ ]	Stable [ X ]				
<b>Conditions To Avoid - Instability</b>						
None known						
Incompatibility - Materials To Avoid	1					
Strong oxidizing agents.						
Hazardous Decomposition Or Byproducts						
Oxides of carbon from combustion.						
Hazardous Polymerization:	Will occur [ ]	Will not occur [ X ]				
<b>Conditions To Avoid - Hazardous P</b>	olymerization					
Hazardous polymerization will	not occur.					
11. Toxicological Information						
ACUTE TOXICITY						
Acute oral toxicity: LD50 >5,00	00 mg/kg					
Acute dermal toxicity: LD50 >5	5,000 mg/kg					
$01_{1}$ $1_{1}$ $1_{2}$ $1_{$						

Skin irritation: slightly irritating

Eye irritation: mildly irritating

## Not a dermal sensitizer

#### **Chronic Toxicological Effects**

CHRONIC TOXICITY [Specific to Active Ingredient(s)] Methoprene is not considered a carcinogen. The NOEL for non-carcinogenic effects in an 18 month mouse study was 250 ppm. .

Etofenprox is not listed as a carcinogen by NTP or IARC and is not regulated by OSHA.

In rats the target organs are the liver and thyroid. The NOAEL for chronic toxicity is 3.7 mg/kg/day for male rats. The target organ in mice is the kidney. The NOAEL is 3.1 mg/kg/day for mice.

Piperonyl butoxide: An increase in the number of benign liver tumors in mice fed piperonyl butoxide technical at doses which far exceeded any anticipated daily human intake. Independent and industry toxicology experts have reviewed the data and agree that the findings of the study do not indicate a health risk to humans.

			8				
	Haz	zardous Components (Chemical Name)	CAS #	NTP	IARC	ACGIH	OSHA
	1.	2,4-Dodecadienoic acid,	65733-16-6	n.a.	n.a.	n.a.	n.a.
		11-methoxy-3,7,11-trimethyl-, 1-methylethyl					
		ester, [S-(E,E)]-					
	2.	Etofenprox	80844-07-1	n.a.	n.a.	n.a.	n.a.
	3.	Piperonyl butoxide	51-03-6	n.a.	n.a.	n.a.	n.a.
	Ca	arcinogenicity:	NTP? No	IARC Monograp	hs? No OS	HA Regulated? No	

#### **Additional Toxicological Information**

DEVELOPMENTAL/REPRODUCTIVE TOXICITY [Specific to Active Ingredient(s)]

Methoprene is not a teratogen. The NOEL for maternal and embryo toxicity in rabbits was 200 mg/kg/day. The NOEL for reproductive effects in rats was 2500 ppm.

Etofenprox is not a teratogen. It is does not have adverse effects on reproduction.

Piperonyl butoxide: There were no birth defects or adverse effects on reproductive parameters in tests with rats or rabbits. It is not considered to be teratogenic.

MUTAGENICITY [Specific to Active Ingredient(s)]

Methoprene is not a mutagen.

Etofenprox is not a mutagen.

Piperonyl butoxide is not genotoxic in several tests including the Ames mutagenicity assay, chromosome

aberrations in Chinese hamster ovary (CHO) cells, CHO/HGPRT assay with S9 activation, and in the unscheduled DNA synthesis (UDS) assay in cultured human liver cells.

## **12. Ecological Information**

ECOTOXICITY [Active Ingredients Only] Methoprene Acute Toxicity: fish: LC50 (trout): 760 ppb, (bluegill): > 370 ppb ((S)-Methoprene); aquatic invertebrates: LC50 (Daphnia): 360 ppb ((S)-Methoprene). **Etofenprox Acute Toxicity:** Rainbow trout: LC50 = 3.3 ppbBluegill: LC50 = 8.5 ppbPiperonyl butoxide Acute Toxicity: Highly toxic to fish

**13. Disposal Considerations** 

#### Waste Disposal Method

Wastes resulting from use of this product should be disposed of in accordance with all federal, state and local requirements.

## **14. Transport Information**

#### LAND TRANSPORT (US DOT)

**DOT Proper Shipping Name** 

**DOT Hazard Label:** 

Not regulated as hazardous by U.S. DOT.

None

#### **Additional Transport Information**

Freight Classification: Animal Insecticide NMFC 102120 CL 60.

# **15. Regulatory Information**

No data available.

# **16. Other Information**

#### **Company Policy or Disclaimer**

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.