

**MATERIAL SAFETY DATA SHEET**  
**ADAMS PLUS FLEA & TICK SPRAY FOR**  
**DOGS & CATS**

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Printed: 11/19/2012  
Revision: 08/21/2012

## 1. Product and Company Identification

**Product Code:** 2724-797-270APD  
**Product Name:** ADAMS PLUS FLEA & TICK SPRAY FOR DOGS & CATS  
**Manufacturer Information**  
**Company Name:** Distributed by:  
Farnam Companies, Inc.  
301 West Osborn Road  
Phoenix, AZ  
**Emergency Contact:** Animal or human exposure (800)234-2269  
**Alternate Emergency Contact:** CHEMTREC (Emergency spills) (800)424-9300  
**Information:** Farnam Companies (800)234-2269  
**Preparer Name:** SFaith/Regulatory  
**Revision Date:** 08/21/2012

### Additional Identity Information

100511009 16-oz  
100511010 32-oz

## 2. Composition/Information on Ingredients

| Hazardous Components (Chemical Name)   | CAS #      | Concentration | OSHA PEL | ACGIH TLV |
|--|------------|---------------|----------|-----------|
| 1. Etofenprox  | 80844-07-1 | 0.5 %         |          |           |
| 2. 2,4-Dodecadienoic acid,<br>11-methoxy-3,7,11-trimethyl-, 1-methylethyl<br>ester, [S-(E,E)]- | 65733-16-6 | 0.27 %        |          |           |
| 3. Piperonyl butoxide  | 51-03-6    | 1.75 %        |          |           |

## 3. Hazards Identification

### Emergency Overview

KEEP OUT OF REACH OF CHILDREN  
HAZARDS TO HUMANS AND DOMESTIC ANIMALS – CAUTION: 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? Yes Skin? Yes Eyes? Yes Ingestion?

### Potential Health Effects (Acute and Chronic)

### Recommended Exposure Limits

Solvent (trade secret) = 100ppm (ACGIH TLV)

### Signs and Symptoms Of Exposure

Slight skin irritant.  
Slight eye irritant.

### Medical Conditions Generally Aggravated By Exposure

## 4. First Aid Measures

### Emergency and First Aid Procedures

IF SWALLOWED: Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person.

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 eyes. Call a poison control center or doctor for treatment advice.

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IF ON SKIN OR CLOTHING: If you suspect a reaction to this product. Discontinue use. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

## 5. Fire Fighting Measures

**Flammability Classification:** Combustible Liquid  
**Flash Pt:** 41.80 C  
**Explosive Limits:** LEL: 12 UEL: 3  
**Autoignition Pt:** NA

### Fire Fighting Instructions

Firefighters should wear full protective clothing including self-contained breathing apparatus.

### Flammable Properties and Hazards

#### Hazardous Combustion Products

Incomplete combustion may produce carbon monoxide

#### Extinguishing Media

Dry chemical, CO2, Alcohol foam, or water spray

#### 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 waterways inhabited by aquatic organisms. Soak up with absorbent material and place in container for disposal.

### Additional Accidental Spill Information

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.

### Precautions To Be Taken in Storing

Do not store near heat or open flame. Store away from children and animals.

## 8. Exposure Controls/Personal Protection

### Respiratory Equipment (Specify Type)

May be necessary

### Eye Protection

See below

### Protective Gloves

See below

### Other Protective Clothing

### Engineering Controls (Ventilation etc.)

Use with adequate ventilation.

### Work/Hygienic/Maintenance Practices

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

### Additional Exposure Control Information

Use appropriate protective equipment to prevent contact with eyes, clothing and skin, including chemical resistant gloves and protective eyewear. If ventilation is inadequate to control airborne vapor concentrations below recommended exposure limits, respiratory protection may be necessary. End users of this product should consult product labeling for personal protective equipment recommendations.

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**9. Physical and Chemical Properties**

**Physical States:** ☐ Gas ☒ Liquid ☐ Solid  
**Melting Point:** NA  
**Boiling Point:** NA  
**Decomposition Temperature:** NA  
**Autoignition Pt:** NA  
**Flash Pt:** 41.80 C  
**Explosive Limits:** LEL: 12 UEL: 3  
**Specific Gravity (Water = 1):** NA  
**Density:** 0.9544 G/ML at 20.0 C  
**Bulk density:** NA  
**Vapor Pressure (vs. Air or mm Hg):** NA  
**Vapor Density (vs. Air = 1):** NA  
**Evaporation Rate:** NA  
**Solubility in Water:**  
**Solubility Notes**  
Miscible with water  
**Percent Volatile:** N.A.  
**Viscosity:** NA  
**Heat Value:** NA  
**Particle Size:** NA  
**Corrosion Rate:** NA  
**pH:** 6.38  
**Appearance and Odor**  
Clear liquid

**10. Stability and Reactivity**

**Stability:** Unstable ☐ Stable ☒  
**Conditions To Avoid - Instability**  
**Incompatibility - Materials To Avoid**  
Strong oxidizers  
**Hazardous Decomposition Or Byproducts**  
**Hazardous Polymerization:** Will occur ☐ Will not occur ☒  
**Conditions To Avoid - Hazardous Polymerization**

**11. Toxicological Information**

**Toxicological Information**

**ACUTE TOXICITY**

Acute oral toxicity: LD50 >5,000 mg/kg

Acute dermal toxicity: LD50 >5,000 mg/kg

Skin irritation: Slightly irritating

Eye irritation: Moderately irritating

Not a dermal sensitizer

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**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.

**Carcinogenicity/Other Information**

**Carcinogenicity:** NTP? No IARC Monographs? No OSHA 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 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.

**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. .

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## 12. Ecological Information

**General 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 ppb

Bluegill: LC50 = 8.5 ppb

Piperonyl butoxide

Acute Toxicity:

Rainbow trout: LC50 = 6.12 ppm

Bluegill: LC50 = 8.5 ppb 5.37 ppm

Sheepshead minnow: LC50 = 3.94 ppm

Mysid shrimp: LC50 = 0.32 ppm

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**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. For additional regulatory information, see section 15 of this document.

**14. Transport Information**

**LAND TRANSPORT (US DOT)**

**DOT Proper Shipping Name**

NOT REGULATED VIA HIGHWAY OR RAIL  
Consumer Commodity ORM-D-AIR Air transport within U.S.  
Freight Classification: Insecticides Spray

**Additional Transport Information**

**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.