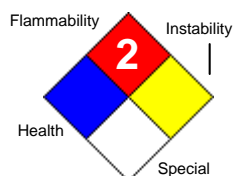


# MATERIAL SAFETY DATA SHEET

## ADAMS PLUS FLEA & TICK MIST WITH PRECOR



Printed: 01/31/2011  
 Revision: 01/31/2011  
 Supersedes Revision: 02/10/2009  
 Date Created: 09/16/2006

### 1. Product and Company Identification

**Product Code:** 2724-404-270-A  
**Product Name:** ADAMS PLUS FLEA & TICK MIST WITH PRECOR  
**Manufacturer Information**  
**Company Name:** Distributed by:  
 Farnam Companies, Inc.  
 301 West Osborn Road  
 Phoenix, AZ  
**Emergency Contact:** CHEMTREC (800)424-9300  
**Alternate Emergency Contact:** District of Columbia (202)483-0414  
**Information:** Farnam Companies, Inc. (800)234-2269  
**Preparer Name:** S.Faith, Regulatory  
**Additional Identity Information**  
 16-oz 100503560  
 32-oz 100503442

### 2. Composition/Information on Ingredients

Hazardous Components (Chemical Name)	CAS #	Concentration	OSHA PEL	ACGIH TLV
1. 2,4-Dodecadienoic acid, 11-methoxy-3,7,11-trimethyl-, 1-methylethyl ester, [S-(E,E)]-	65733-16-6	0.27 %	No data.	No data.
2. Pyrethrins and Pyrethroids	8003-34-7	0.2 %	5 mg/m3	5 mg/m3
3. Piperonyl butoxide	51-03-6	0.37 %	No data.	No data.
4. N-OCTYL BICYCLOHEPTENE DICARBOXIMIDE	113-48-4	0.62 %	No data.	No data.

### 3. Hazards Identification

#### Emergency Overview

KEEP OUT OF THE REACH OF CHILDREN

Caution: Harmful if swallowed or absorbed through the skin. Avoid contact with skin, eyes, or clothing. May cause dermal sensitization.(SKIN ALLERGY)

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

#### Potential Health Effects (Acute and Chronic)

No data available.

#### Recommended Exposure Limits

Pyrethrins = 5 mg/m3 (OSHA PEL & ACGIH)

#### Signs and Symptoms Of Exposure

Those associated with allergies, hay fever, i.e., itchy, runny eyes, stuffy/ runny nose, chest discomfort, possible hives.

### 4. First Aid Measures

#### Emergency and First Aid Procedures

**EYES:** Hold eye open and flush slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first five minutes, then continue rinsing eye.

**SKIN:** Remove contaminated clothing and rinse skin immediately with water for 15 - 20 minutes.

**INGESTION:** Call physician or Poison Control Center. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by poison control center or doctor. Do not give anything by mouth or

**MATERIAL SAFETY DATA SHEET**  
**ADAMS PLUS FLEA & TICK MIST WITH**  
**PRECOR**

Page: 2  
Printed: 01/31/2011  
Revision: 01/31/2011  
Supercedes Revision: 02/10/2009

induce vomiting to an unconscious person.

INHALATION: Remove to fresh air

**Note to Physician**

Treat symptomatically.

## 5. Fire Fighting Measures

**Flammability Classification:** Combustible Liquid  
**Flash Pt:** 41.00 C  
**Explosive Limits:** LEL: 12 UEL: 3

**Fire Fighting Instructions**

Normal procedures, Do not allow fire fighting water to escape into waterways or sewers.

**Flammable Properties and Hazards**

None known

**Hazardous Combustion Products**

Incomplete combustion may produce carbon monoxide.

**Extinguishing Media**

Dry chemical, CO2 or Alcohol foam

**Unsuitable Extinguishing Media**

Water may be ineffective.

**Additional Fire Fighting Information**

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

## 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.

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 contaminate water, food or food by storage. Store away from children. Do not use or store near heat or open flame.

## 8. Exposure Controls/Personal Protection

**Respiratory Equipment (Specify Type)**

See below

**Eye Protection**

See below

**Protective Gloves**

See below

**Other Protective Clothing**

If prolonged exposure is anticipated, it is recommended for users and handlers to wear a NIOSH approved organic vapor/pesticide respirator, impervious gloves, goggles, and other protective clothing to prevent skin contact.

**Engineering Controls (Ventilation etc.)**

Use with adequate ventilation.

**Work/Hygienic/Maintenance Practices**

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

**MATERIAL SAFETY DATA SHEET**  
**ADAMS PLUS FLEA & TICK MIST WITH**  
**PRECOR**

Page: 3  
Printed: 01/31/2011  
Revision: 01/31/2011  
Supercedes Revision: 02/10/2009

## 9. Physical and Chemical Properties

**Physical States:** [ ] Gas [ X ] Liquid [ ] Solid  
**Melting Point:** NA  
**Boiling Point:** NA  
**Autoignition Pt:** No data.  
**Flash Pt:** 41.00 C  
**Explosive Limits:** LEL: 12 UEL: 3  
**Specific Gravity (Water = 1):** .9504 at 20.0 C  
**Density:** NA  
**Bulk density:** NA  
**Vapor Pressure (vs. Air or mm Hg):** NA  
**Vapor Density (vs. Air = 1):** NA  
**Evaporation Rate (vs Butyl Acetate=1):** NA  
**Solubility in Water:** Miscible  
**Percent Volatile:** N.A.  
**Saturated Vapor Concentration:** NA  
**Viscosity:** NA  
**Heat Value:** NA  
**Particle Size:** NA  
**Corrosion Rate:** NA  
**pH:** 5.47  
**Appearance and Odor**

Pale yellow transparent liquid

## 10. Stability and Reactivity

**Stability:** Unstable [ ] Stable [ X ]  
**Conditions To Avoid - Instability**  
No data available.  
**Incompatibility - Materials To Avoid**  
Strong oxidizers.  
**Hazardous Decomposition Or Byproducts**  
None  
**Hazardous Polymerization:** Will occur [ ] Will not occur [ X ]  
**Conditions To Avoid - Hazardous Polymerization**

No data available.

## 11. Toxicological Information

ORAL: LD50 (rat): >34,000 mg/kg (HDT) (Based on S -Methoprene)  
DERMAL: LD50 (rabbit): >2,100 mg/kg (HDT)  
4HR. Inhalation:  
LC50 (rat) >5.19 mg/L air (Based on (S)-Methoprene) LC50 (rat) > 5 mg/l (Based on Pyrethrins)

TARGET ANIMAL SAFETY: No adverse effects have been observed in groups of dogs and cats, when applied at 7 day intervals, at levels up to 5 times the recommended rate.

CHRONIC TOXICITY : [(RS)-Methoprene Technical] Methoprene is not considered as an oncogenic compound. The NOEL for non-carcinogenic effects in an 18 month mouse study was 250 ppm. [PYRETHRINS] In a 2-year feeding study, rats were fed pyrethrum at dietary levels of 10, 50 and 250 mg/kg/day. The highest level had no significant effect on growth or survival. Slight though definite liver damage was observed, especially at higher dosage levels. In a 90-day feeding study, dogs that were fed pyrethrins at a dietary level of 5,000 ppm

**MATERIAL SAFETY DATA SHEET**  
**ADAMS PLUS FLEA & TICK MIST WITH**  
**PRECOR**

Page: 4  
Printed: 01/31/2011  
Revision: 01/31/2011  
Supersedes Revision: 02/10/2009

showed tremors, ataxia, labored respiration and salivation during the first month of exposure. [PIPERONYL BUTOXIDE] In rats at a dietary level of 10,000 ppm of Piperonyl Butoxide, (dosage of 650 mg/kg/day), there was a moderate reduction of weight gain, increased relative weight of the kidneys and increased relative weight of the liver. A 2-year bioassay of technical rats, lymphomas occurred at incidences that were dose related. In the male mice, adenomas of the lacrimal gland occurred at incidences that were dose related but were not significantly higher than that in the control group. Thus, the occurrence of this tumor in the male mice was not clearly related to the administration of Piperonyl Butoxide.

MUTAGENICITY : [(RS)-Methoprene Technical] Methoprene is not a mutagenic compound. [PYRETHRINS] was not found to be genotoxic and did not damage DNA in any study conducted. [PIPERONYL BUTOXIDE] Piperonyl Butoxide is not considered to be a mutagen.

### Carcinogenicity/Other Information

No data available.

Hazardous Components (Chemical Name)	CAS #	NTP	IARC	ACGIH	OSHA
1. 2,4-Dodecadienoic acid, 11-methoxy-3,7,11-trimethyl-, 1-methylethyl ester, [S-(E,E)]-	65733-16-6	n.a.	n.a.	n.a.	n.a.
2. Pyrethrins and Pyrethroids	8003-34-7	n.a.	n.a.	A4	n.a.
3. Piperonyl butoxide	51-03-6	n.a.	n.a.	n.a.	n.a.
4. N-OCTYL BICYCLOHEPTENE DICARBOXIMIDE	113-48-4	n.a.	n.a.	n.a.	n.a.

### Carcinogenicity:

NTP? No

IARC Monographs? No

OSHA Regulated? No

### Additional Toxicological Information

SKIN IRRITATION: Non-irritating (rabbit)

EYE IRRITATION: Moderately irritating (rabbit)

SENSITIZER: Positive (guinea pig)

## 12. Ecological Information

ENVIRONMENTAL FATE [Based on (RS)-Methoprene]

Hydrolysis: T1/2 > 4 weeks

Photolysis: T1/2 < 10 hours

Soil half life: ~ 10 days

Water solubility: < 2 ppm

ECOTOXICITY [Based on (S)-Methoprene]

Acute Toxicity: fish:LC50 (trout): 760 ppb, (bluegill): > 370 ppb aquatic invertebrates:LC50 (Daphnia): 360 ppb

## 13. Disposal Considerations

### Waste Disposal Method

Do not contaminate water or food by disposal. Do not reuse empty container. Wrap and put in trash. Unused product, as a waste material, may be classified as a hazardous waste due to ignitability. Recommended disposal is by an EPA approved hazardous waste management facility.

## 14. Transport Information

### LAND TRANSPORT (US DOT)

#### DOT Proper Shipping Name

DOT49CFR Description: N/A Via Highway & Rail. Via Air & Intl: Flammable Liquid, N.O.S. (2-propanol) 3 UN 1993 Pg. III "LTD QTY" if inner pkg. less than or equal to 5 LTR or 160 Fl. OZ.

**MATERIAL SAFETY DATA SHEET**  
**ADAMS PLUS FLEA & TICK MIST WITH**  
**PRECOR**

Page: 5  
Printed: 01/31/2011  
Revision: 01/31/2011  
Supercedes Revision: 02/10/2009

**Additional Transport Information**

FREIGHT CLASSIFICATION: Animal N.O.I. O/T Poison NMFC I 102120 CL60-

**15. Regulatory Information**

**Regulatory Information**

CERCLA (Superfund): Reportable Quantity (RQ): 1 lb. of Pyrethrin Contact the National Response Center (800)244-8802 for spills exceeding the RQ.

RCRA: Regulated due to ignitability.

SARA 311/312 HAZARD CATEGORIES

Immediate Health: Yes (irritant)

Delayed Health: No

Fire: Yes

Sudden Pressure: No

Reactivity: No

**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.