Safety Data Sheet

Section 1: Identification

Product identifier

- Adams Flea & Tick Spot On For Dogs 81 lbs & Over (XL), Adams Flea & Tick Spot On For Dogs 56-80 lbs (LG), Adams Flea & Tick Spot On For Dogs 32-55 lbs (MD), Adams Flea & Tick Spot On For Dogs 13-31 lbs (SM), Adams Flea & Tick Spot On For Dogs 6-12 lbs (Toy)

Product Name

Adams Flea & Tick Spot On For Dogs 81 lbs & Over (XL), Adams Flea & Tick Spot On For Dogs 56-80 lbs (LG), Adams Flea & Tick Spot On For Dogs 32-55 lbs (MD), Adams Flea & Tick Spot On For Dogs 13-31 lbs (SM), Adams Flea & Tick Spot On For Dogs 6-12 lbs (Toy)

Synonyms

100507381; 100507382; 100507384; 100507386; 100507388; 100508100; 100508101; 100508102; 100508103; 100508104; 100508105; 100508106; 100508107; 100508108; 100508109; 100516356; 100516357; 100516358; 100516359; 100516380; EPA Reg. No.: 2724-811-270; RF2164 A/T Combo

Product Description

Pale yellow oily liquid.

Relevant identified uses of the substance or mixture and uses advised against

Recommended use

Flea, tick & mosquito treatment for dogs.

Restrictions on use

Avoid contact with skin and eyes. Keep out of reach of children and pets.

Details of the supplier of the safety data sheet

Manufacturer

Farnam Companies, Inc.
1501 E. Woodfield Road, Suite 200W
Schaumburg, IL 60173
United States

Emergency telephone number

Manufacturer

1-800-234-2269

Manufacturer (Transportation)

1-800-424-9300 - CHEMTREC

Manufacturer (Transportation)

1-703-527-3887 - CHEMTREC - Outside the US collect calls accepted

Section 2: Hazard Identification

United States (US)

According to: OSHA 29 CFR 1910.1200 HCS

Classification of the substance or mixture

OSHA HCS 2012

- Not classified; does not meet hazard criteria.

Label elements

OSHA HCS 2012

Hazard statements

No label element(s) required

Other hazards
Section 3 - Composition/Information on Ingredients

Substances

- Material does not meet the criteria of a substance.

Mixtures

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Identifiers</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>(s)-Methoprene</td>
<td>CAS:65733-16-6</td>
<td>3.6%</td>
</tr>
<tr>
<td>Piperonyl butoxide</td>
<td>CAS:51-03-6</td>
<td>5%</td>
</tr>
<tr>
<td>Etofenprox</td>
<td>CAS:80844-07-1</td>
<td>30%</td>
</tr>
<tr>
<td>Other ingredients</td>
<td>NDA</td>
<td>61.4%</td>
</tr>
</tbody>
</table>

Section 4: First-Aid Measures

Description of first aid measures

Inhalation
- IF INHALED: If breathing is difficult, remove person to fresh air and keep at rest in a position comfortable for breathing. Call a physician if symptoms persist.

Skin
- IF ON SKIN: Wash skin with soap and water.

Eye
- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

Ingestion
- IF SWALLOWED: Do not induce vomiting unless told to by a poison control center or doctor. Rinse mouth.

Most important symptoms and effects, both acute and delayed
- Refer to Section 11 - Toxicological Information.

Indication of any immediate medical attention and special treatment needed
- Notes to Physician: Treat symptomatically and supportively.

Section 5: Fire-Fighting Measures

Extinguishing media

Suitable Extinguishing Media
- In case of fire use media as appropriate for surrounding fire.

Unsuitable Extinguishing Media
- None known.

Special hazards arising from the substance or mixture

Unusual Fire and Explosion Hazards
- None known.

Hazardous Combustion
- None known.
Products
Advice for firefighters

• Wear positive pressure self-contained breathing apparatus (SCBA).

Section 6 - Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

Personal Precautions

• Do not walk through spilled material. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate enclosed areas.

Emergency Procedures

• Stay upwind. Keep unauthorized personnel away. Ventilate closed spaces before entering.

Environmental precautions

• Prevent entry into waterways, sewers, basements or confined areas.

Methods and material for containment and cleaning up

Containment/Clean-up Measures

• SMALL SPILLS: Take up with sand or other non-combustible absorbent material and place into containers for later disposal.
  LARGE SPILLS: Dike far ahead of spill for later disposal.

Section 7 - Handling and Storage

Precautions for safe handling

Handling

• Use good safety and industrial hygiene practices. Avoid contact with skin or eyes.

Conditions for safe storage, including any incompatibilities

Storage

• Keep this product in its tightly closed original container, when not in use. Store in a cool, dry (preferably locked) area that is inaccessible to children and pets.

Section 8 - Exposure Controls/Personal Protection

Control parameters

Exposure controls

Engineering Measures/Controls

• No data available.

Personal Protective Equipment Pictograms

Respiratory

• Not required with normal use.

Eye/Face

• Wear chemical splash safety goggles.

Skin/Body

• Wear appropriate gloves.

Environmental Exposure Controls

• Controls should be engineered to prevent release to the environment, including procedures to prevent spills, atmospheric release and release to waterways. Follow best practice for site management and disposal of waste.
Section 9 - Physical and Chemical Properties

Information on Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Material Description</th>
<th>Physical Form</th>
<th>Appearance/Description</th>
<th>Odor Threshold</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Liquid</td>
<td>Pale yellow oily liquid.</td>
<td>No data available</td>
</tr>
<tr>
<td>Color</td>
<td>Pale yellow.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Odor</td>
<td>Weak, neutral, chemical-like.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>General Properties</th>
<th>Boiling Point</th>
<th>Melting Point/Freezing Point</th>
<th>Decomposition Temperature</th>
<th>pH</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No data available</td>
<td></td>
<td>No data available</td>
<td>No data available</td>
</tr>
<tr>
<td>Specific Gravity/Relative Density</td>
<td>0.99 @ 20 °C(68 °F) Water=1</td>
<td>Water Solubility</td>
<td>Insoluble</td>
<td></td>
</tr>
<tr>
<td>Viscosity</td>
<td>100-150 cPs @ 20°C / 25 cPs @ 40°C</td>
<td></td>
<td></td>
<td></td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Volatility</th>
<th>Vapor Pressure</th>
<th>Vapor Density</th>
<th>Evaporation Rate</th>
<th>No data available</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>No data available</td>
<td>No data available</td>
<td>No data available</td>
<td>No data available</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Flammability</th>
<th>Flash Point</th>
<th>UEL</th>
<th>LEL</th>
<th>Flammability (solid, gas)</th>
<th>Autoignition</th>
<th>No data available</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>136 °C(276.8 °F) PMCC (Pensky-Martins Closed Cup)</td>
<td></td>
<td>No data available</td>
<td></td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td></td>
<td>UEL</td>
<td></td>
<td></td>
<td>Not relevant.</td>
<td></td>
<td>No data available</td>
</tr>
</tbody>
</table>

| Environmental        | Octanol/Water Partition coefficient | No data available | |
|----------------------|------------------------------------|-------------------||

Section 10: Stability and Reactivity

Reactivity

- No dangerous reaction known under conditions of normal use.

Chemical stability

- Stable under normal temperatures and pressures.

Possibility of hazardous reactions

- Hazardous polymerization will not occur.

Conditions to avoid

- None known.

Incompatible materials

- None known.

Hazardous decomposition products

- None known.

Section 11 - Toxicological Information

Information on toxicological effects
Adams Flea & Tick Spot On For Dogs 81 lbs & Over (XL), Adams Flea & Tick Spot On For Dogs 56-80 lbs (LG), Adams Flea & Tick Spot On For Dogs 32-55 lbs (MD), Adams Flea & Tick Spot On For Dogs 13-31 lbs (SM), Adams Flea & Tick Spot On For Dogs 6-12 lbs (Toy)

GHS Properties

<table>
<thead>
<tr>
<th>Classification</th>
<th>GHS Properties</th>
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</thead>
<tbody>
<tr>
<td>Acute toxicity</td>
<td>OSHA HCS 2012 • Classification criteria not met</td>
</tr>
<tr>
<td>Skin corrosion/Irritation</td>
<td>OSHA HCS 2012 • Classification criteria not met</td>
</tr>
<tr>
<td>Serious eye damage/Irritation</td>
<td>OSHA HCS 2012 • Classification criteria not met</td>
</tr>
<tr>
<td>Skin sensitization</td>
<td>OSHA HCS 2012 • Classification criteria not met</td>
</tr>
<tr>
<td>Respiratory sensitization</td>
<td>OSHA HCS 2012 • Classification criteria not met</td>
</tr>
<tr>
<td>Aspiration Hazard</td>
<td>OSHA HCS 2012 • Classification criteria not met</td>
</tr>
<tr>
<td>Carcinogenicity</td>
<td>OSHA HCS 2012 • Classification criteria not met</td>
</tr>
<tr>
<td>Germ Cell Mutagenicity</td>
<td>OSHA HCS 2012 • Classification criteria not met</td>
</tr>
<tr>
<td>Toxicity for Reproduction</td>
<td>OSHA HCS 2012 • Classification criteria not met</td>
</tr>
<tr>
<td>STOT-SE</td>
<td>OSHA HCS 2012 • Classification criteria not met</td>
</tr>
<tr>
<td>STOT-RE</td>
<td>OSHA HCS 2012 • Classification criteria not met</td>
</tr>
</tbody>
</table>

Route(s) of entry/exposure • Inhalation, Ingestion, Eyes, and Skin

Potential Health Effects

Inhalation

- Acute (Immediate) • Under normal conditions of use, no health effects are expected.
- Chronic (Delayed) • No data available.

Skin

- Acute (Immediate) • May cause mild irritation.
- Chronic (Delayed) • Prolonged and repeated exposure to Etofenprox can cause skin irritation.

Eye

- Acute (Immediate) • May cause mild irritation.
- Chronic (Delayed) • No data available.

Ingestion

- Acute (Immediate) • Under normal conditions of use, no health effects are expected.
- Chronic (Delayed) • No data available.

Mutagenic Effects

- Etofenprox has been found negative for mutagenicity potential using the Ames test, chromosomal aberration and micronucleus test methods. Piperonyl butoxide was not genotoxic in several tests, including the Ames mutagenicity assay, chromosome aberration 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. Methoprene has been tested and found negative for mutagenicity potential.

Carcinogenic Effects

- Etofenprox is not classified as carcinogen by NTP, IARC and OSHA. Piperonyl butoxide is not classified as carcinogen by NTP, IARC and OSHA. Methoprene is not classified as carcinogen by NTP, IARC and OSHA.
Reproductive Effects

- Etofenprox did not produce teratogenic or reproductive effects in laboratory experiments. Piperonyl butoxide did not produce any birth defects or adverse effects on reproductive parameters in tests with rats and rabbits. Methoprene is not a teratogenic compound. The NOEL for maternal and embryotoxicity in rabbits was 200 mg/kg/day. The NOEL for reproductive effects in rats was 500 ppm.

Section 12 - Ecological Information

Toxicity

<table>
<thead>
<tr>
<th>Components</th>
<th>Aquatic Toxicity-Fish: 96 Hour(s) LC50 Sheephead minnow &gt;0.0165 mg/L [Acute]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Etofenprox (30%) 80844-07-1</td>
<td>96 Hour(s) LC50 Rainbow Trout 0.0027 mg/L [Acute]</td>
</tr>
<tr>
<td></td>
<td>Aquatic Toxicity-Crustacea: 48 Hour(s) LC50 Water Flea Daphnia magna 0.0008 mg/L [Acute]</td>
</tr>
<tr>
<td></td>
<td>96 Hour(s) LC50 Mysid shrimp 0.0000188 mg/L [Acute]</td>
</tr>
<tr>
<td></td>
<td>NOEC Water Flea Daphnia magna 0.00017 mg/L [Chronic]</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Components</th>
<th>Aquatic Toxicity-Fish: NOEC Fathead minnow 0.04 mg/L [Chronic]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Piperonyl butoxide (5%) 51-03-6</td>
<td>96 Hour(s) LC50 Rainbow Trout 1.9 mg/L [Acute]</td>
</tr>
<tr>
<td></td>
<td>96 Hour(s) LC50 Sheephead minnow 3.94 mg/L [Acute]</td>
</tr>
<tr>
<td></td>
<td>Aquatic Toxicity-Crustacea: 48 Hour(s) LC50 Daphnia magna 0.51 mg/L [Acute]</td>
</tr>
<tr>
<td></td>
<td>48 Hour(s) LC50 Mysid shrimp 0.49 mg/L [Acute]</td>
</tr>
<tr>
<td></td>
<td>NOEC Daphnia magna 0.03 mg/L [Chronic]</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Components</th>
<th>Aquatic Toxicity-Fish: 96 Hour(s) LC50 Rainbow Trout 0.76 mg/L [Acute]</th>
</tr>
</thead>
<tbody>
<tr>
<td>(s)-Methoprene (3.6%) 65733-16-6</td>
<td>96 Hour(s) LC50 Bluegill 0.37 mg/L [Acute]</td>
</tr>
<tr>
<td></td>
<td>NOEC Fathead Minnow 0.048 mg/L [Chronic]</td>
</tr>
<tr>
<td></td>
<td>Aquatic Toxicity-Crustacea: NOEC Mysid Shrimp 0.014 mg/L [Chronic]</td>
</tr>
<tr>
<td></td>
<td>48 Hour(s) LC50 Daphnia 0.36 mg/L [Acute]</td>
</tr>
<tr>
<td></td>
<td>96 hour(s) LC50 Mysid shrimp 0.11 mg/L [Acute]</td>
</tr>
</tbody>
</table>

Persistence and degradability

- Etofenprox is not readily biodegradable. Methoprene degrades rapidly in sunlight, both in water and on inert surfaces. The pesticide also is metabolized rapidly in soil and does not leach. Thus, it should not persist in soil or contaminate ground water.

Bioaccumulative potential

- No data available

Mobility in Soil

- (s)-Methoprene: 10-14 days, rapidly hydrolyzed in soil.

Other adverse effects

Potential Environmental Effects

- No data available.

Section 13 - Disposal Considerations

Waste treatment methods

Product waste

- Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Packaging waste

- Dispose of content and/or container in accordance with local, regional, national, and/or
international regulations. See product label for disposal instructions.

### Section 14 - Transport Information

<table>
<thead>
<tr>
<th>UN number</th>
<th>UN proper shipping name</th>
<th>Transport hazard class (es)</th>
<th>Packing group</th>
<th>Environmental hazards</th>
</tr>
</thead>
<tbody>
<tr>
<td>DOT</td>
<td>Bulk packaging only: Environmentally Hazardous Substance, Liquid, n.o.s. (Etofenprox, Piperonyl butoxide, S-Methoprene)</td>
<td>9</td>
<td>III</td>
<td>Marine Pollutant</td>
</tr>
<tr>
<td>IMO/IMDG</td>
<td>Packaging 5 L or greater: Environmentally Hazardous Substance, Liquid, n.o.s. (Etofenprox, Piperonyl butoxide, S-Methoprene)</td>
<td>9</td>
<td>III</td>
<td>Marine Pollutant</td>
</tr>
<tr>
<td>IATA/ICAO</td>
<td>Packaging 5 L or greater: Environmentally Hazardous Substance, Liquid, n.o.s. (Etofenprox, Piperonyl butoxide, S-Methoprene)</td>
<td>9</td>
<td>III</td>
<td>Acute Aquatic Toxicity</td>
</tr>
</tbody>
</table>

**Special precautions for user**
- None known.
- Not relevant.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

**Other information**
- IMO/IMDG: No data available
- IATA/ICAO: No data available

### Section 15 - Regulatory Information

**Safety, health and environmental regulations/legislation specific for the substance or mixture**

**SARA Hazard Classifications**
- SARA Title III Section 313

**FIFRA – Pesticide Labeling**

This material is a pesticide product registered by the United States Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets (SDS), and for workplace labels of non-pesticide chemicals. The hazard information required on the pesticide label is reproduced below. The pesticide label also includes other important information, including directions for use.

**Precautionary Statements**

**Hazards to Humans and Domestic Animals**

HAZARDS TO HUMANS AND DOMESTIC ANIMALS - CAUTION DO NOT USE ON DOGS LESS THAN 6 LBS OR PUPPIES LESS THAN 10 WEEKS OF AGE. For external use only. Causes moderate eye irritation. Avoid contact with eyes or clothing. Wash hands 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. Consult a veterinarian before using this product on debilitated, aged, pregnant, nursing, or animals on medication. Sensitivities may occur after using ANY pesticide product for pets. If signs of sensitivity occur, bathe your dog/puppy with mild soap and rinse with large amounts of water. If signs continue, consult a veterinarian immediately. Some dogs/puppies may experience hair loss or temporary
skin irritation at the application site. If signs persist or become more severe, contact veterinarian immediately and report incident to company at 1-800-234-2269.

**First Aid**

- If in eyes: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after first 5 minutes, then continue rinsing. Call a poison control center or doctor for treatment advice.

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### Inventory

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS</th>
<th>TSCA</th>
</tr>
</thead>
<tbody>
<tr>
<td>(s)-Methoprene</td>
<td>65733-16-6</td>
<td>No</td>
</tr>
<tr>
<td>Etofenprox</td>
<td>80844-07-1</td>
<td>No</td>
</tr>
<tr>
<td>Piperonyl butoxide</td>
<td>51-03-6</td>
<td>Yes</td>
</tr>
</tbody>
</table>

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### United States

#### Environment

**U.S. - CERCLA/SARA - Section 313 - Emission Reporting**

- Etofenprox: 80844-07-1, Not Listed
- Piperonyl butoxide: 51-03-6, 1.0 % de minimis concentration
- (s)-Methoprene: 65733-16-6, Not Listed

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### Section 16 - Other Information

- **Revision Date**: 18/February/2016
- **Last Revision Date**: 18/February/2016
- **Preparation Date**: 18/February/2016
- **Disclaimer/Statement of Liability**:

  The information and statements herein are believed to be reliable but are not to be construed as a warranty or representation for which we assume legal responsibility. Users should undertake sufficient verification and testing to determine the suitability for their own particular purpose of any information or products referred to herein. NO WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE IS MADE.