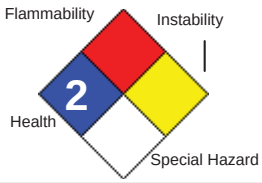
MATERIAL SAFETY DATA SHEET
ADAMS FLEA & TICK COLLAR FOR DOGS



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1. Product and Company Identification

Product Code: 2724-254-270-AD

Product Name: ADAMS FLEA & TICK COLLAR FOR DOGS

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: SFaith/Regulatory

Additional Identity Information

Small dog (3006045), Large dog (3006046)

2. Composition/Information on Ingredients

Hazardous Components (Chemical Name)	CAS #	Concentration	OSHA PEL	ACGIH TLV
1. Propoxur	114-26-1	10.0 %	No data.	0.5 mg/m3

3. Hazards Identification

Emergency Overview

KEEP OUT OF REACH OF CHILDREN
PRECAUTIONARY STATEMENT
EMERGENCY OVERVIEW: Caution: Do not allow children to play with this collar. Do not open protective pouch until ready to use. Dust will form on this collar during storage. Do not get dust or collar in mouth; harmful if swallowed. Do not get in eyes; will cause temporary pupillary constriction. The dust released by this collar is a cholinesterase inhibitor. Wash hands thoroughly with soap and water after handling.

Route(s) of Entry: Inhalation? No Skin? Yes Eyes? Yes Ingestion? N.A.

Potential Health Effects (Acute and Chronic)

Due to product form, method of use, and use history, human intoxication has not been reported. However, Propoxur is a cholinesterase inhibitor that may produce the following symptoms: headache, nausea, vomiting, diarrhea, tightness in chest, ataxia, anorexia, tearing, sweating, salivation, pin-point pupils, pulmonary edema, cyanosis, convulsions.

Recommended Exposure Limits

Not established except for Propoxur: 0 .5 mg/m3 (OSHA PEL & ACGIH TLV).

LD 50 / LC 50

Oral: LD50 (rat): >68 mg/kg (Propoxur)
Dermal: LD50 (rabbit): >2.000 mg/kg (Propoxur)
Inhalation: LC50 (rat): 0.5 mg/L (4 hour study) (Propoxur)

Signs and Symptoms Of Exposure

Skin Irritation: Minimally irritating.
Eye Irritation: Mildly irritating.
Sensitizer: Not a sensitizer.

Medical Conditions Generally Aggravated By Exposure

No data available.

4. First Aid Measures

Emergency and First Aid Procedures

Eye: Hold eye open and rinse slowly and gently for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.
Skin: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.
Ingestion: Call a poison control center or doctor immediately for treatment advice. Have a person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison center or doctor. Do not give anything by mouth to an unconscious person.
Inhalation: Remove victim to fresh air.

Note to Physician

Contains an N-methyl carbamate that inhibits cholinesterase. Atropine is antidotal only if symptoms of cholinesterase inhibition are present.

5. Fire Fighting Measures

Flammability Classification:	Combustible solid	
Flash Pt:	NA	
Explosive Limits:	LEL: No data.	UEL: No data.
Autoignition Pt:	NA	

Fire Fighting Instructions

Normal procedures. Do not allow fire fighting water to escape into water-ways or sewers.

Flammable Properties and Hazards

None known.

Hazardous Combustion Products

Highly irritating methyl isocyanate gas and fumes of hydrogen chloride can be formed during burning.

Extinguishing Media

Water fog, foam, CO2.

Unsuitable Extinguishing Media

None known

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

Because of individual packaging, possibilities of a release or spill are remote. However, should one occur, place in container for proper disposal. Do not allow large quantities to enter waterways.

Additional Accidental Spill Information

Absorbents: None necessary due to product form.

7. Handling and Storage

Precautions To Be Taken in Handling

Wash hands and face thoroughly with soap and water after handling product. If collar is temporarily removed, wrap in paper or plastic; do not allow children to have access to collar.

Precautions To Be Taken in Storing

Store in original unopened container away from children. Do not open protective pouch until ready to use.

Other Precautions

If extensive exposure is anticipated, users and handlers should wear a MSHA/NIOSH approved organic vapor/dust/pesticide respirator, impervious gloves, goggles, and other appropriate clothing to prevent skin contact.

8. Exposure Controls/Personal Protection

Respiratory Equipment (Specify Type)

If extensive exposure is anticipated, users and handlers should wear a NIOSH approved organic vapor/dust/pesticide respirator.

Eye Protection

No data available.

Protective Gloves

No data available.

Other Protective Clothing

If extensive exposure is anticipated, users and handlers should wear impervious gloves, goggles, and other appropriate clothing to prevent skin contact.

Engineering Controls (Ventilation etc.)

Natural ventilation is sufficient.

Work/Hygienic/Maintenance Practices

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

9. Physical and Chemical Properties

Physical States:	[ ] Gas [ ] Liquid [X] Solid
Melting Point:	90.00 C
Boiling Point:	NA
Autoignition Pt:	NA
Flash Pt:	NA
Specific Gravity (Water = 1):	1.2
Vapor Pressure (vs. Air or mm Hg):	1.29 mPa at 20.0 C
Vapor Density (vs. Air = 1):	NA
Evaporation Rate (vs Butyl Acetate=1):	NA
Solubility in Water:	0.2 at 20.0 C

Solubility Notes

Slightly soluble in water (0.2% at 20C).

Percent Volatile: N.A.

Appearance and Odor

Plastic strips with powdery surface, faint phenolic odor.

10. Stability and Reactivity

Stability: Unstable [ ] Stable [X]

Conditions To Avoid - Instability

None known

Incompatibility - Materials To Avoid

Strong acids, strong oxidizers.

Hazardous Decomposition Or Byproducts

Methyl isocyanate gas, toxic fumes of C1, oxides of nitrogen can be formed on burning.

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

Conditions To Avoid - Hazardous Polymerization

No data available.

11. Toxicological Information

CHRONIC TOXICITY [Specific to Active Ingredient(s)]
In a combined chronic/carcinogenicity toxicity study, rats were fed doses at a maximum 5,000 ppm (222-292 mg/kg/day) for up to 2 years. The NOEL was 200 ppm (8.2 mg/kg/day for males and 11.0 mg/kg/day for females) based on reduced weight gain and urinary bladder hyperplasia.
Propoxur is highly toxic to honey bees.
DEVELOPMENTAL/REPRODUCTIVE TOXICITY [Specific to Active Ingredient(s)]
In a developmental toxicity study in rabbits, animals were orally dosed at concentrations up to 30 mg/kg/day. The NOEL for maternal and developmental toxicity was 10 mg/kg/day based on fetal body weight.
MUTAGENICITY [Specific to Active Ingredient(s)]
The weight of evidence suggests that Propoxur is not a mutagen.

Chronic Toxicological Effects

No data available.

Carcinogenicity/Other Information

ACCORDING TO CALIFORNIA PROPOSITION 65, THIS PRODUCT CONTAINS PROPOXUR, A CHEMICAL KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER.

Hazardous Components (Chemical Name)	CAS #	NTP	IARC	ACGIH	OSHA
1. Propoxur	114-26-1	n.a.	n.a.	A3	n.a.

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

12. Ecological Information

ENVIRONMENTAL FATE [Based on (RS)-Methoprene Technical]
Hydrolysis: T1/2 > 4 weeks (Methoprene).
Photolysis: T1/2 < 10 hours (Methoprene).
Soil half life: ~ 10 days (Methoprene).
Water solubility: < 2 ppm (Methoprene).
Propoxur is highly toxic to bees.

ECOTOXICITY [Active Ingredients Only]
Acute Toxicity: Propoxur:
Fish:LC50 (trout): 3.7 ppm (96 hour study).
Aquatic invertebrates: Daphnia: EC50: 0.15 mg/L (48-hr).
S-Methoprene:
Fish: LC50 (trout): 760 ppb, (bluegill): > 370 ppb.
Aquatic invertebrates: LC50 (Daphnia): 360 ppb.
Highly toxic to Daphnia.

13. Disposal Considerations

Waste Disposal Method

Do not reuse container or collar. Dispose of in trash. Do not contaminate water, feed or food by disposal. If household waste, wrap and put in trash. For larger quantities: dispose of at a state/EPA approved hazardous waste facility.

RCRA Waste ID Code: U411

14. Transport Information

LAND TRANSPORT (US DOT)

DOT Proper Shipping Name Not regulated as hazardous by D.O.T.

Additional Transport Information

Freight classification: Collars, animal insect repellent, in individual retail containers in boxes: NMFC 49998 Sub 1 Class 100. In individual paper and foil laminated pouches other than individual retail containers, in boxes: NMFC 49998 Sub 2 Class 85.

15. Regulatory Information

No data available.

16. Other Information

CERCLA (Superfund): Reportable Quantity (RQ): Propoxur = 100 lb.

RCRA: Not regulated in this product form. Propoxur - U411.

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.