



MATERIAL SAFETY DATA SHEET

EFFITIX[®] Topical Solution for Dogs

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATIONS AND OF THE COMPANY UNDERTAKING

Product Name EFFITIX[®] Topical Solution for Dogs
Product Description Topical Insecticide
Manufacturer/Supplier Virbac AH, Inc.
Address P.O. Box 162059
Fort Worth, Texas 76161
Phone Number (800) 338-3659
Chemtrec Number (24 hour) (800) 424-9300
Emergency Number: (800) 338-3659 for Human and Animal Medical Emergencies
Emergency Number (Animal) ASPCS Hotline Number at 1-800-345-4735
MSDS Date: November 30, 2011
Supersedes MSDS Dated: April 26, 2011
Material Safety Data Sheet in compliance with OSHA's Hazcom Standard (29 CFR 1910.1200)

2. HAZARDS IDENTIFICATION

Emergency Overview
CAUTION!
Avoid contact with eyes, skin and clothing.
Harmful if swallowed.
Wash hands thoroughly with soap and water after handling.
Keep out of reach of children.
Do not use on cats or rabbits.
Read entire label before each use.

Routes of Entry

Eye contact - Skin contact - Ingestion - Inhalation

Carcinogenic Status

Considered carcinogenic by EPA. See section 11.

Target Organs

Eyes - Skin - Blood - Central Nervous System - Respiratory System

Health Effects - Eyes

Contact with eyes may cause moderate irritation.

Health Effects - Skin

Repeated, prolonged contact with skin may cause mild irritation.

Health Effects - Ingestion

Harmful if swallowed. Ingestion of this material may cause gastrointestinal effects such as nausea, vomiting and diarrhea. Repeated ingestion can cause adverse effects to the central nervous system and blood.

Health Effects - Inhalation

Prolonged inhalation may cause irritation to mucous membranes.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component Name	CAS Number	Concentration
Fipronil	120068-37-7	6.01%
Permethrin	52645-53-1	44.88%
Diethylene Glycol Monoethyl Ether	111-90-0	45 - 55%



4. FIRST AID MEASURES

Eyes

Hold eye open and rinse slowly and gently with water for at least 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 immediately with plenty of water for at least 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 person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

Inhalation

Remove person to fresh air. Seek medical attention if symptoms persist.

Advice to Physicians

Treat symptomatically.

Additional Information

Have product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact the Hotline number 1-800-338-3659 for health concerns, emergency medical treatment information or pesticide incidents.

5. FIRE - FIGHTING MEASURES

Extinguishing Media

Use extinguishing media appropriate for surrounding materials.

Unusual Fire and Explosion Hazards

Can release hazardous vapors during a fire.

Protective Equipment for Fire-Fighting

Wear full protective clothing and self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

Wear appropriate protective equipment. Wipe up and transfer into suitable containers for recovery or disposal. Prevent the material from entering drains or watercourses.

7. HANDLING AND STORAGE

Store in original container in a cool, dry place. Store away from children and pets. Do not use on cats or rabbits. As a precaution, pregnant women should avoid contact with this product. Do not store near foodstuffs. Do not contaminate water, food or feed by storage. Wear appropriate protective clothing. Avoid contact with skin, eyes and clothing. Wash and remove contaminated clothing before reuse. Avoid breathing vapors. Wash hands thoroughly after handling and before eating, drinking, or smoking.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Standards

Exposure limits are listed below, if they exist.

Diethylene Glycol Monoethyl Ether

Supplier recommended limit: 25 ppm TWA



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Fipronil

None established

Permethrin

None established

Engineering Control Measures

No specific measures necessary. Good general room ventilation is expected to be adequate to control airborne levels.

Respiratory Protection

Not required under normal conditions of use. Professional groomers and those with repeated and extended exposures should consider the use of respiratory protection if there is a risk of exposure to high vapor concentrations or aerosols. The specific respirator selected must be based on the airborne concentration found in the workplace and must not exceed the working limits of the respirator.

Hand Protection

Nitrile or butyl gloves.

Eye Protection

Wear safety goggles or safety glasses if there is risk of exposure.

Body Protection

Normal work wear.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Liquid
Color	Clear yellowish
Odor	Mild
pH	No data available
Specific Gravity	No data available
Boiling Range/Point (°C/F)	No data available
Melting Point (°C/F)	No data available
Flash Point (PMCC) (°C/F)	94.3/207
Explosion Limits (%)	No data available
Vapor Pressure	No data available
Density	No data available
Solubility in Water	No data available
Vapor Density (Air = 1)	No data available

10. STABILITY AND REACTIVITY

Stability

Stable under normal conditions.

Conditions to Avoid

Heat - high temperatures

Materials to Avoid

Strong oxidizers – strong acids – strong bases

Hazardous Polymerization

Will not occur.



10. STABILITY AND REACTIVITY

Hazardous Decomposition Products

Oxides of carbon – aldehydes – ketones - organic acids – hydrogen fluoride – oxides of nitrogen – oxides of sulfur – hydrochloric acid

11. TOXICOLOGICAL INFORMATION

See packaging for additional information.

Acute Toxicity

Effitix: 500 mg/kg <Oral LD50 (female rat) <2000 mg/kg

Dermal LD50 (rabbit) >2000 mg/kg

Specific Target Organ Systemic Toxicity (single and repeat)

Diethylene Glycol Monoethyl Ether: Prolonged, repeated exposure studies have caused adverse effects to the blood and central nervous system.

Serious Eye damage/Eye Irritation

Fipronil: Moderate eye irritation (rabbit).

Permethrin: Moderate eye irritation (rabbit).

Skin Corrosion/Irritation

Permethrin: Slight skin irritant (rabbit).

Fipronil: Minimally irritating to skin (rabbit).

Respiratory or Skin Sensitization

Effitix: Non-sensitizing and non-irritating (dermal – guinea pig)

Carcinogenicity

Permethrin: EPA Classification: Likely to be Carcinogenic to Humans (by oral route)

Germ Cell Mutagenicity

Diethylene Glycol Monoethyl Ether: In vitro genetic toxicity studies were predominantly negative.

Animal genetic toxicity studies were negative.

Fipronil: Mutagenicity studies were negative in in-vitro and in-vivo laboratory studies.

Toxicity to Reproduction

Diethylene Glycol Monoethyl Ether: Did not cause embryotoxicity, fetotoxicity or developmental toxicity in laboratory animal studies. One study showed some toxic effects but only at the highest concentrations tested.

Fipronil: Animal studies show that Fipronil is developmentally toxic only at doses that were toxic to the parent animals.

12. ECOLOGICAL INFORMATION

This insecticide is toxic to aquatic organisms.

Mobility

No relevant studies identified.

Persistence/Degradability

No relevant studies identified.

Bio-accumulation

No relevant studies identified.

Ecotoxicity

Fipronil: EC50 Daphnia magna 190 ug/l 48h

LC50 Rainbow trout 248 ug/l 96h

Permethrin: LC50 Bluegill sunfish 1.8 ug/l 48 hr



13. DISPOSAL CONSIDERATIONS

Product Disposal:

Do not contaminate water, food or feed by disposal. Never place any unused product down an indoor or outdoor drain. Call your local solid waste agency for disposal instructions.

Container Disposal:

Offer for recycling, if available. Do not reuse container.

14. TRANSPORT INFORMATION

Contact supplier for transport information.

15. REGULATORY INFORMATION

US REGULATIONS (Federal, State) and INTERNATIONAL CHEMICAL REGISTRATION LAWS

TSCA Listing

This product contains ingredients that are listed on or exempt from listing on the EPA Toxic Substance Control Act Chemical Substance (TSCA) Inventory.

DSL (Canadian) Listing

This product contains ingredients that have not been verified for listing on the Domestic Substance List (DSL).

WHMIS Classification

D.2.A, D.2.B

This product was classified in accordance with the hazard criteria of the Canadian Controlled Products Regulations and the MSDS contains all the information required by these regulations.

MA Right To Know Law

This product contains the following chemicals on the Massachusetts Right to Know Law: BHA (25013-16-5) - Permethrin (52645-53-1)

PA Right To Know Law

This product contains the following chemicals on the Pennsylvania Hazardous Substance List: Diethylene Glycol Monoethyl Ether

NJ Right To Know Law

This product contains the following chemicals on the New Jersey Workplace Hazardous Substance List: Diethylene Glycol Monoethyl Ether

California Proposition 65

This product contains the following materials which the State of California has found to cause cancer, birth defects or other reproductive harm: None

SARA Title III Sect. 311/312 Categorization

Immediate (acute) Delayed (Chronic)

SARA Title III Sect. 313

This product contains the following chemicals that are listed in Section 313 at or above de minimis concentrations: Diethylene Glycol Monoethyl Ether - Permethrin (52645-53-1)

16. OTHER INFORMATION

NFPA Ratings

NFPA Code for Flammability - 1

NFPA Code for Health - 2

NFPA Code for Reactivity - 0

NFPA Code for Special Hazards – 0



16. OTHER INFORMATION

HMIS Ratings

HMIS Code for Flammability - 1

HMIS Code for Health - 2*

HMIS Code for Reactivity - 0

HMIS Code for Personal Protection - See Section 8

Abbreviations

ACGIH: American Conference of Governmental Industrial Hygienists

BOD: Biological Oxygen Demand

CAS#: Chemical Abstracts Service Number

FIFRA: Federal Insecticide, Fungicide and Rodenticide Act

IARC: International Agency for Research on Cancer

*(HMIS): Chronic Hazard

LC50: Lethal Concentration 50%

LD50: Lethal Dose 50%

N/A: Denotes no applicable information found or available

NTP: National Toxicology Program

OSHA: Occupational Safety and Health Administration

PEL: Permissible Exposure Limit

STEL: Short Term Exposure Limit

TLV: Threshold Limit Value

TSCA: Toxic Substance Control Act

For further information: (800) 338-3659

The information and recommendations presented in this MSDS are based on sources believed to be accurate. Virbac AH, Inc. assumes no liability for the accuracy or completeness of this information. It is the user's responsibility to determine the suitability of the **material** for their particular purposes. In particular, we make **NO WARRANTY OF MERCHANTABILITY OR ANY OTHER WARRANTY, EXPRESS OR IMPLIED**, with respect to such information, and we assume no liability resulting from its use. Users should ensure that any use **or disposal** of the material is in accordance with applicable Federal, State, and local laws and regulations.