



SAFETY DATA SHEET

EFFITIX® Plus Topical Solution for Dogs

1. IDENTIFICATION

Product Name
Recommended use of the chemical and restrictions on use

EFFITIX® Plus Topical Solution for Dogs

Identified uses

Topical insecticide

Restrictions on Use

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. For external use on dogs over 8 weeks of age.

Company Identification

Virbac AH, Inc.
P.O. Box 162059
Fort Worth, Texas 76161
(800) 338-3659

Customer Information Number

Emergency Telephone Number

Chemtrec Number

Other Emergency Number:

(800) 424-9300

Poison Control Center: 1-800-222-1222 (human)

HOT LINE NUMBER: 1-800-345-4735 (human and pet)

Issue Date

January 18, 2016

Supersedes Date

This is the first issue.

Safety Data Sheet prepared in accordance with OSHA's Hazard Communication Standard (29 CFR 1910.1200) and the Globally Harmonized System of Classification and Labelling of Chemicals (GHS)

2. HAZARD IDENTIFICATION

Hazard Classification

Acute Toxicity (Oral) - Category 4

Serious eye damage/eye irritation - Category 2A

Specific Target Organ Toxicity (Single Exposure) - Category 1

Specific Target Organ Toxicity (Repeat Exposure) - Category 1

Carcinogenicity - Category 2

Acute hazard to the aquatic environment - Category 1 (This classification not adopted by OSHA)

Label Elements

Hazard Symbols



Signal Word: Danger

Hazard Statements

Harmful if swallowed.

Causes serious eye irritation.

Causes damage to organs (central nervous system) (route of exposure: oral)

Causes damage to organs (central nervous system) through prolonged or repeated exposure.

Suspected of causing cancer. (route of exposure: oral)

Very toxic to aquatic life.



2. HAZARD IDENTIFICATION

Precautionary Statements

Prevention

Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Wash hands thoroughly after handling.
Do not eat, drink, or smoke when using this product.
Wear eye protection, face protection, protective clothing, and protective gloves.
Do not breathe mist, vapors or spray.
Avoid release to the environment.

Response

If swallowed: Call a poison center or doctor if you feel unwell. Rinse mouth.
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.
If exposed or concerned: Call a poison center or doctor.
Get medical advice or attention if you feel unwell.
Collect spillage.

Storage

Store locked up.

Disposal

Dispose of contents/container in accordance with local regulation.

Other Hazards

See Section 15 for FIFRA label elements.

Specific Concentration Limits

The values listed below represent the percentages of ingredients of unknown toxicity.

Acute oral toxicity	<5%
Acute dermal toxicity	<5%
Acute inhalation toxicity	45 - 55%
Acute aquatic toxicity	45 - 55%

3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms:

This product is a mixture.

Component Name	CAS Number	Concentration
Fipronil	120068-37-7	6.0%
Permethrin	52645-53-1	44.8%
Pyriproxyfen	95737-68-1	1.8%
Glycol ether	NA	40 - 50%

4. FIRST-AID MEASURES

Description of necessary first-aid measures

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 the eye. Call a poison control center or doctor for treatment advice.



4. FIRST-AID MEASURES

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 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 to an unconscious person.

Inhalation

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

Most important symptoms/effects, acute and delayed

Aside from the information found under Description of necessary first aid measures (above) and Indication of immediate medical attention and special treatment needed, no additional symptoms and effects are anticipated.

Indication of immediate medical attention and special treatment needed

Notes to Physicians

Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Extinguishing Media

Water spray, carbon dioxide and dry chemical. 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

Personal precautions, protective equipment and emergency procedures

Wear appropriate protective clothing.

Environmental Precautions

Prevent the material from entering drains or watercourses.

Methods and materials for containment and cleaning up

Contain and transfer into suitable containers for recovery or disposal.

7. HANDLING AND STORAGE

Precautions for safe handling

Wear appropriate protective clothing. Wash hands thoroughly after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet.



SAFETY DATA SHEET

EFFITIX® Plus Topical Solution for Dogs

7. HANDLING AND STORAGE

Conditions for safe storage

Store in tightly closed original container in a cool, dry, locked place. Keep away from children and pets.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure limits are listed below, if they exist.

Glycol ether

Supplier recommended limit: 25 ppm TWA

Appropriate engineering controls

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

Individual protection measures

Respiratory Protection

Not required under normal conditions of use.

Skin Protection

Chemical resistant gloves.

Eye/Face Protection

Safety glasses or goggles.

Body Protection

Normal work wear.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Physical State	Liquid
Color	Clear yellow
Odor	Mild
Odor Threshold	No data available
pH	No data available
Specific Gravity	No data available
Boiling Range/Point (°C/F)	Not applicable
Melting Point (°C/F)	Not applicable
Flash Point (PMCC) (°C/F)	No data available
Vapor Pressure	Not applicable
Evaporation Rate (BuAc=1)	Not applicable
Solubility in Water	No data available
Vapor Density (Air = 1)	Not applicable
VOC	Not applicable
Partition coefficient (n-octanol/water)	Not applicable
Viscosity	Not applicable
Auto-ignition Temperature	No data available
Decomposition Temperature	No data available
Upper explosive limit	No data available
Lower explosive limit	No data available
Flammability (solid, gas)	No data available



10. STABILITY AND REACTIVITY

Reactivity

Data is not available

Chemical Stability

Stable under normal conditions.

Possibility of hazardous reactions

Hazardous polymerization will not occur.

Conditions to Avoid

Heat - high temperatures

Incompatible Materials

None known.

Hazardous Decomposition Products

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

11. TOXICOLOGICAL INFORMATION

See product insert and/or packaging for additional information.

Acute Toxicity

Product

Oral LD50 (rat) est. 550 mg/kg (UK-VMD) (based on similar product)

Dermal LD50 (rabbit) >2000 mg/kg (based on similar product)

Fipronil

Oral LD50 (rat) 50 mg/kg < LD50 < 500 mg/kg (EPA)

Dermal LD50 (rabbit) >2000 mg/kg (EPA)

Inhalation LC50 (rat) 0.05 mg/L < LC50 < 0.5 mg/L (EPA)

Pyriproxyfen

Oral LD50 (rat) >5000 mg/kg

Dermal LD50 (rabbit) >2000 mg/kg (EPA)

Inhalation LC50 (rat) 1.3 mg/L 4hr

Permethrin

Oral LD50 (rat, female) 2280 mg/kg (EPA)

Dermal LD50 (rabbit) >2000 mg/kg (EPA)

Specific Target Organ Toxicity (STOT) – single exposure

Fipronil: In a single dose study in rats adverse neurological effects were observed. A NOAEL of 0.5 mg/kg bodyweight was established. (UK-VMD)

Permethrin: Acute Neurotoxicity Study in Rats: LOAEL = 75 mg/kg/day based on observations of clinical signs (i.e. aggression, abnormal and/or decreased movement) and increased body temperature (EPA) A NOAEL for neurotoxicity was established at 15 mg/kg per day. (UK-VMD)

Pyriproxyfen: Subchronic oral toxicity studies conducted with Pyriproxyfen Technical in the rat, mouse and dog indicate a low level of toxicity. The NOELs from these studies were 1000 ppm (149.4 mg/kg/day) in mice, 100 mg/kg/day in dogs and 400 ppm (23.5 mg/kg/day) in rats.



11. TOXICOLOGICAL INFORMATION

Specific Target Organ Toxicity (STOT) – repeat exposure

Fipronil: In a 14 day repeat dose neurotoxicity study in dogs, the animals displayed neurotoxic signs which included hypoactivity, salivation, ataxia, convulsions, tremors, stiffened body, and muscle twitching. (UK-VMD)

Permethrin: 15-Day Inhalation Study in Rats LOAEL = 0.583 mg/l (converts to oral equivalent of 154 mg/kg/day) based on body tremors and hypersensitivity to noise. (EPA). A neurotoxicity study in rats showed dose-related responses. At doses greater than 1500 ppm animals displayed tremors, splayed hind legs and staggered gait. Deaths were observed at 4000 ppm. A NOAEL of 750 ppm was established. (UK-VMD)

Pyriproxyfen: No significant systemic toxicity was observed in either the 21-day dermal toxicity study in rats or the 28-day inhalation toxicity study in rats. Subchronic and chronic toxicity studies in mice, rats and dogs indicate that the liver and kidney are the principal target organs with slight anemia occurring in the rodent species.

Serious Eye damage/Irritation

Product: In- vitro study results classify this product as a potentially severe eye irritant. (UK-VMD, based on similar substance)

Fipronil: Moderate eye irritation (rabbit). (EPA)

Permethrin: Moderate eye irritation (rabbit). (EPA)

Pyriproxyfen: Eye irritation reversible within 7 days (Category III - EPA)

Skin Corrosion/Irritation

Pyriproxyfen: Mild or slight skin irritation at 72 hours. (Category IV - EPA)

Respiratory or Skin Sensitization

Product: Non-sensitizing and non-irritating (dermal – guinea pig) (based on a similar product).

Fipronil: Not a dermal sensitizer (EPA)

Pyriproxyfen: Non-sensitizing (guinea pig)

Carcinogenicity

Permethrin: EPA Classification: Likely to be Carcinogenic to Humans (by oral route) based on two reproducible benign tumor types (lung and liver) in the mouse, equivocal evidence of carcinogenicity in Long Evans rats, and supporting structural activity relationships (SAR) information.

Fipronil: EPA: The carcinogenic potential of Fipronil has been classified as a Group C possible human carcinogen based on increases in thyroid follicular cell tumors in both sexes of the rat, which were statistically significant by both pair-wise and trend analyses. These results are thought to be due to a rodent specific liver effect not relevant to humans.

Pyriproxyfen: There was no evidence of carcinogenicity in either a 78-week mouse feeding study or in the 2-year rat chronic/carcinogenicity study. Pyriproxyfen is classified as a "Group E" chemical - no evidence of carcinogenicity to humans.

Germ Cell Mutagenicity

Available data indicates this product is not expected to be mutagenic.

Reproductive Toxicity

Fipronil: Studies indicate that Fipronil is a non-teratogenic substance and does not cause reproductive toxicity. (UK-VMD)

Pyriproxyfen: There was no evidence of increased susceptibility to rat and rabbit fetuses in prenatal developmental toxicity studies or to rat offspring in the 2-generation rat reproduction study. No evidence of developmental toxicity was seen in special studies that evaluated pyriproxyfen toxicity following perinatal and prenatal exposure in rats.



11. TOXICOLOGICAL INFORMATION

Aspiration Hazard

Not an aspiration hazard.

12. ECOLOGICAL INFORMATION

This pesticide is toxic to fish and aquatic invertebrates. Do not apply directly to water. Do not contaminate water when disposing of equipment washwaters or rinsate.

Ecotoxicity

Fipronil

LC50 Bluegill sunfish 0.085 mg/l 96h

EC50 Daphnia magna 0.19 mg/l 48h

Permethrin

LC50 Bluegill sunfish 0.79ppb 48 hr

EC50 Hexagenia bilineata 0.1ppb 48hr

Pyriproxyfen: Moderately to highly toxic to fish and moderately to very highly toxic to aquatic invertebrate species.

Mobility in soil

No relevant studies identified.

Persistence/Degradability

No relevant studies identified.

Bioaccumulative Potential

No relevant studies identified.

Other adverse effects

No relevant studies identified.

13. DISPOSAL CONSIDERATIONS

Product Disposal: Call your local solid waste agency for disposal instructions. Never place unused product down any indoor or outdoor drain.

Container Disposal: Nonrefillable container. Do not reuse or refill this container. If empty, offer for recycling if available.

14. TRANSPORT INFORMATION

Contact supplier for transport information.

15. REGULATORY INFORMATION

United States TSCA Inventory

This product is excluded from TSCA as it regulated under FIFRA Section 3(2)(B)(ii) when used as a pesticide.



15. REGULATORY INFORMATION

Federal Insecticide, Fungicide, and Rodenticide Act

This is a pesticide product registered by the Environmental Protection Agency and is subject to certain labelling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals.

Following is the hazard information as required on the pesticide label:

Front Panel:

KEEP OUT OF REACH OF CHILDREN

CAUTION

READ ENTIRE LABEL BEFORE EACH USE

Back Panel:

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

HAZARDS TO HUMANS: Harmful if swallowed or absorbed through the skin. Causes eye irritation. Avoid contact with skin, eyes, or clothing. Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove and wash contaminated clothing before reuse.

STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage and disposal.

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

PESTICIDE/CONTAINER DISPOSAL: **If empty:** Nonrefillable. Do not use or refill this container. Offer for recycling, if available. **If partially filled:** Call your local solid waste agency for disposal instructions. Never place unused product down any indoor or outdoor drain.

Canada DSL Inventory

This product is excluded from DSL listing as it is regulated under the Pest Control Products Act when used as a pesticide.

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: Glycol ether - Permethrin (52645-53-1)

16. OTHER INFORMATION

Legend

ACGIH: American Conference of Governmental Industrial Hygienists

BOD: Biological Oxygen Demand

CAS#: Chemical Abstracts Service Number

DSL: Domestic Substances List

ECHA: European Chemicals Agency

EPA: Environmental Protection Agency

FIFRA: Federal Insecticide, Fungicide and Rodenticide Act

HDT: Highest Dose Tested

HMIS: Hazardous Materials Identification System IARC: International Agency for Research on Cancer

LC50: Lethal Concentration 50%



16. OTHER INFORMATION

LD50: Lethal Dose 50%
LOEL: Lowest Observed Effect Level
N/A: Denotes no applicable information found or available
NFPA: National Fire Protection Association
NOEL: No Observed Effect Level
OSHA: Occupational Safety and Health Administration
PEL: Permissible Exposure Limit
TSCA: Toxic Substances Control Act
SARA: Superfund Amendments and Reauthorization Act
SDS: Safety Data Sheet
STEL: Short Term Exposure Limit
WHMIS: Workplace Hazardous Materials Information System
TLV: Threshold Limit Value
TSCA: Toxic Substance Control Act
UK-VMD: United Kingdom Veterinary Medicines Directorate

Revision Date: January 18, 2016
Replaces: This is the first issue.
Changes made: Not applicable.

Information Source and References

This SDS is prepared by Hazard Communication Specialists based on information provided by internal company references.

Prepared By: EnviroNet LLC.

EFFITIX is a registered trademark of Virbac S.A. in the US.

The information and recommendations presented in this SDS 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.