



MATERIAL SAFETY DATA SHEET
Virbac® Yard Spray Concentrate
Product Number: 611016

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

Product Name Virbac® Yard Spray Concentrate
Product Description Insecticide concentrate for outdoor use on lawns and around residential premises
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
Other Emergency Numbers: Poison Control Center: 1-800-222-1222
MSDS Revision Date: September 24, 2010
MSDS Supersedes Date: February 23, 2009

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.
Avoid breathing spray, mist or vapors.
Keep out of reach of children.
Read entire label before each use.

Routes of Entry

Eye contact - Skin contact - Ingestion - Inhalation

Carcinogenic Status

Not considered carcinogenic by NTP, IARC, and OSHA.

Target Organs

Eyes - Skin

Health Effects - Eyes

Contact with eyes can cause irritation.

Health Effects - Skin

Contact with skin may cause slight irritation and skin sensitization.

Health Effects - Ingestion

Harmful if swallowed. Ingestion of this material may cause gastrointestinal effects such as nausea, vomiting, diarrhea, abdominal cramps and constipation.

Health Effects - Inhalation

Prolonged, repeated inhalation of spray, mist or vapors may cause adverse health effects.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component Name	CAS Number	Concentration
Esfenvalerate	66230-04-4	0.44%
Ethyl Alcohol	64-17-5	1-5%

4. FIRST AID MEASURES

Eyes

Immediately flood the eye with plenty of water for at least 15-20 minutes, holding the eye open. Obtain medical attention if soreness or redness persists.

Skin

If irritation develops wash skin thoroughly with soap and water. Obtain medical attention if redness or soreness persists.

Ingestion

Call a poison control center or doctor immediately for treatment advice. 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.

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. Hydrogen cyanide gas may be produced if heated in excess of 160°F (71.1° C).

Protective Equipment for Fire-Fighting

Wear full protective clothing and self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

Wear appropriate protective clothing. 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 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.

Ethyl Alcohol

ACGIH: 1000 ppm 15-min STEL

OSHA: PEL 1000ppm (1900 mg/m³) 8h TWA

Esfenvalerate

Supplier Recommended OEL: 2 mg/m³ TWA, Skin

Engineering Control Measures

Product is for outdoor use only.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

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

Elbow length chemical resistant gloves

Eye Protection

Safety glasses or goggles.

Body Protection

Waterproof apron.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Liquid
Color	Milky white
Odor	No data available
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)	Not flammable
Explosion Limits (%)	No data available
Vapor Pressure	No data available.
Density	No data available
Solubility in Water	Soluble
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

Oxidizers - acids - alkalis

Hazardous Polymerization

Will not occur.

Hazardous Decomposition Products

Oxides of carbon. Hydrogen cyanide gas may be produced by thermal decomposition at temperatures in excess of 160°F (71.1°C).

11. TOXICOLOGICAL INFORMATION

See product insert and/or packaging for additional information.

Acute Toxicity

Esfenvalerate: Oral LD50 (rat) 325 mg/kg, Dermal LD50 (rabbit) >2000 mg/kg

Inhalation LC50 Rat (Sprague-Dawley, male) inhalation 480 mg/m³ 4 hr

Ethyl Alcohol: Oral LD50 (rat) 7060 mg/kg

11. TOXICOLOGICAL INFORMATION

Specific Target Organ Systemic Toxicity (single and repeat)

Ethyl Alcohol: Chronic exposure can result in adverse liver and central nervous system effects.

Serious Eye damage/Eye Irritation

Ethanol: Causes severe eye irritation.

Skin Corrosion/Irritation

Esfenvalerate: Slight skin irritant.

Respiratory or Skin Sensitization

Esfenvalerate: Animal tests for skin sensitization have shown both positive and negative results.

Carcinogenicity

Not considered carcinogenic by NTP, IARC, and OSHA.

Germ Cell Mutagenicity

No relevant studies identified.

Toxicity to Reproduction

Ethyl Alcohol: Ingestion of ethyl alcohol during pregnancy has caused adverse reproductive effects (fetal alcohol syndrome) but only at doses that are maternally toxic.

12. ECOLOGICAL INFORMATION

This pesticide is highly toxic to fish and aquatic invertebrates. Do not apply directly to water. Drift from treated areas may be hazardous to organisms in adjacent aquatic sites. Do not contaminate water when disposing of equipment washwaters or rinsate.

Mobility

No relevant studies identified.

Persistence/Degradability

No relevant studies identified.

Bio-accumulation

No relevant studies identified.

Ecotoxicity

Esfenvalerate: LC50, fathead minnow (age 36 days) 0.22 ug/l 96h

LC50, water flea Daphnia magna (age<24 hrs) 0.029 ug/l 96h

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:

Dispose of empty container in a sanitary landfill. Place in trash or offer for recycling, if available. Do not reuse container.

14. TRANSPORT INFORMATION

DOT CFR 172.101 Data	Not Regulated
UN Proper Shipping Name	Not Regulated
UN Class	None.
UN Number	None.
UN Packaging Group	None.
Classification for AIR Transportation (IATA)	Consult current IATA Regulations prior to shipping by air.

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. (EPA Reg. No. 2382-122)

DSL (Canadian) Listing

This product contains ingredients that are not listed on the Domestic Substance List (DSL).

WHMIS Classification

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: Ethyl Alcohol (64-17-5) - Trisodium Nitrilotriacetate (5064-31-30) trace

PA Right To Know Law

This product contains the following chemicals on the Pennsylvania Hazardous Substance List: Ethyl Alcohol (64-17-5)

NJ Right To Know Law

This product contains the following chemicals on the New Jersey Workplace Hazardous Substance List: Ethyl Alcohol (64-17-5)

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)

SARA Title III Sect. 313

This product contains the following chemicals that are listed in Section 313 at or above de minimis concentrations: None

16. OTHER INFORMATION

NFPA Ratings

NFPA Code for Flammability - 0

NFPA Code for Health - 1

NFPA Code for Reactivity - 0

NFPA Code for Special Hazards - 0

HMIS Ratings

HMIS Code for Flammability - 0

HMIS Code for Health - 2

HMIS Code for Reactivity - 0

HMIS Code for Personal Protection - See Section 8

16. OTHER INFORMATION

Abbreviations

N/A: Denotes no applicable information found or available
CAS#: Chemical Abstracts Service Number
ACGIH: American Conference of Governmental Industrial Hygienists
OSHA: Occupational Safety and Health Administration
TLV: Threshold Limit Value
TSCA: Toxic Substance Control Act
FIFRA: Federal Insecticide, Fungicide and Rodenticide Act
PEL: Permissible Exposure Limit
STEL: Short Term Exposure Limit
NTP: National Toxicology Program
IARC: International Agency for Research on Cancer
LC50: Lethal Concentration 50%
LD50: Lethal Dose 50%
BOD: Biological Oxygen Demand

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