



Safety Data Sheet

Section 1: Identification

Product identifier

Product Name

- **ENDURE Sweat-Resistant Fly Spray for Horses**

Synonyms

- 100502139; 100526253; 100526254; 3002221; 3002431; 3003242; 3004324; EPA Reg. No.: 270-251

Product Description

- Milky white liquid.

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

Recommended use

- Insecticide.

Restrictions on use

- Avoid contact with eyes, skin or clothing. Use in well ventilated area. Keep out of reach of children.

Details of the supplier of the safety data sheet

Manufacturer

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

www.farnam.com

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

- Eye Mild Irritation 2B

Label elements

OSHA HCS 2012

WARNING

Hazard statements • Causes eye irritation

Precautionary statements

Prevention • Wash thoroughly after handling.

Response •

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.

Other hazards

OSHA HCS 2012

- This product is extremely toxic to fish and aquatic vertebrates. This product is toxic to bees exposed to direct treatment on blooming crops or weeds.

Section 3 - Composition/Information on Ingredients

Substances

- Material does not meet the criteria of a substance.

Mixtures

Composition		
Chemical Name	Identifiers	%
Pyrethrin	CAS:8003-34-7	0.2%
Butoxypolypropylene glycol	CAS:9003-13-8	5%
Cypermethrin	CAS:52315-07-8	0.15%
Piperonyl butoxide	CAS:51-03-6	1.6%
Other ingredients	NDA	93.05%

Section 4: First-Aid Measures

Description of first aid measures

Inhalation

- IF INHALED: Remove person to fresh air and keep at rest in a position comfortable for breathing. Call a poison control center or doctor if you feel unwell.

Skin

- IF ON SKIN: Wash skin with soap and water. If irritation or rash occurs, get medical advice/attention.

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: Call a POISON CONTROL center or doctor if you feel unwell. Rinse mouth. Do NOT induce vomiting.

Most important symptoms and effects, both acute and delayed

- Causes mild eye irritation. 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
- SMALL FIRES: Dry chemical, CO₂, water spray or regular foam.
LARGE FIRE: Water spray, fog or regular foam.

- Unsuitable Extinguishing Media
- None known.

- Firefighting Procedures
- Do not allow fire fighting water to escape into waterways or sewers.

Special hazards arising from the substance or mixture

- Unusual Fire and Explosion Hazards
- No data available.

- Hazardous Combustion Products
- No data available.

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
- Avoid contact with skin, eyes, and clothing. Ventilate enclosed areas. Avoid breathing fumes.

- Emergency Procedures
- Stay upwind. Avoid release into the environment. Do not allow runoff into water, storm drains or drainage ditches. Ventilate closed spaces before entering.

Environmental precautions

- Avoid run off to waterways and sewers.

Methods and material for containment and cleaning up

- Containment/Clean-up Measures
- Absorb spills with an inert material, clay granules or other inert absorbent material and put in container for disposal.

Section 7 - Handling and Storage

Precautions for safe handling

- Handling
- Use good safety and industrial hygiene practices. Wash thoroughly with soap and water after handling and before eating, drinking, or using tobacco.

Conditions for safe storage, including any incompatibilities

- Storage
- Store in cool, dry, secure place. Keep out of reach of children. Keep only in the original container. Store pesticides away from food, pet food, feed, seed, fertilizers,

and veterinary supplies.

Section 8 - Exposure Controls/Personal Protection

Control parameters

Exposure Limits/Guidelines • No data available.

Exposure Limits/Guidelines				
	Result	ACGIH	NIOSH	OSHA
Pyrethrin (8003-34-7)	TWAs	5 mg/m ³ TWA	5 mg/m ³ TWA	5 mg/m ³ TWA

Exposure Limits Supplemental

ACGIH

•Pyrethrin (8003-34-7): TLV Basis - **Critical Effects:** (liver damage; lower respiratory tract irritation)

Exposure controls

Engineering

- Local exhaust ventilation.

Measures/Controls

Personal Protective Equipment

Pictograms



Respiratory

- If prolonged exposure is anticipated, it is recommended for handlers to wear an approved MSHA/NIOSH organic vapor/pesticide respirator.

Eye/Face

- If prolonged exposure is anticipated, it is recommended for handles to wear goggles.

Hands

- If prolonged exposure is anticipated, it is recommended for handlers to wear impervious gloves.

Skin/Body

- If prolonged exposure is anticipated, it is recommended for handlers to wear appropriate clothing to prevent skin contact.

Environmental Exposure Controls

- Refer to Section 13 - Disposal Considerations.

Section 9 - Physical and Chemical Properties

Information on Physical and Chemical Properties

Material Description			
Physical Form	Liquid	Appearance/Description	Milky white liquid.
Color	Milky white.	Odor	Mild solvent.
Odor Threshold	No data available	Physical and Chemical Properties	No data available
General Properties			
Boiling Point	No data available	Melting Point/Freezing Point	No data available
Decomposition Temperature	No data available	pH	5.8

Specific Gravity/Relative Density	= 0.998 Water=1	Water Solubility	Not soluble
Viscosity	< 100 Centipoise (cPs, cP) or mPas	Explosive Properties	No data available
Volatility			
Vapor Pressure	No data available	Vapor Density	No data available
Evaporation Rate	No data available		
Flammability			
Flash Point	No flash to boil	UEL	No data available
LEL	No data available	Autoignition	No data available
Flammability (solid, gas)	No data available		
Environmental			
Octanol/Water Partition coefficient	No data available		

Section 10: Stability and Reactivity

Reactivity

- No data available.

Chemical stability

- Stable

Possibility of hazardous reactions

- Hazardous polymerization will not occur.

Conditions to avoid

- Excessive heat.

Incompatible materials

- Strong acids, strong bases and oxidizing agents.

Hazardous decomposition products

- Decomposes upon heating to produce toxic gases which may include: hydrogen chloride, carbon oxides.

Section 11 - Toxicological Information

Information on toxicological effects

	CAS	
ENDURE Sweat-Resistant Fly Spray for Horses	NDA	Acute Toxicity: Ingestion/Oral-Rat • >5000 g/kg; Inhalation-Rat • >5000 mg/L 4 Hour (s); Skin-Rabbit • >2000 g/kg; Irritation: Eye-Rabbit • Mild irritation; Skin-Rabbit • Essentially non-irritating

GHS Properties	Classification
Acute toxicity	OSHA HCS 2012 • Acute Toxicity - Dermal - Classification criteria not met; Acute Toxicity - Inhalation - Classification criteria not met; Acute Toxicity - Oral - Classification criteria not met
Skin corrosion/Irritation	OSHA HCS 2012 • Classification criteria not met
Serious eye damage/Irritation	OSHA HCS 2012 • Eye Mild Irritation 2B

Skin sensitization	OSHA HCS 2012 • Classification criteria not met
Respiratory sensitization	OSHA HCS 2012 • Classification criteria not met
Aspiration Hazard	OSHA HCS 2012 • Classification criteria not met
Carcinogenicity	OSHA HCS 2012 • Classification criteria not met
Germ Cell Mutagenicity	OSHA HCS 2012 • Classification criteria not met
Toxicity for Reproduction	OSHA HCS 2012 • Classification criteria not met
STOT-SE	OSHA HCS 2012 • Classification criteria not met
STOT-RE	OSHA HCS 2012 • Classification criteria not met

Potential Health Effects

Inhalation

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

Skin

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

Eye

- Acute (Immediate)** • May cause mild irritation.
- Chronic (Delayed)** • Under normal conditions of use, no health effects are expected.

Ingestion

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

Section 12 - Ecological Information

Toxicity

Components		
Pyrethrin (0.2%)	8003-34-7	Aquatic Toxicity-Fish: 96 Hour(s) LC50 <i>Rainbow trout</i> 0.0051 mg/L [Acute] 96 Hour(s) LC50 <i>Sheepshead minnow</i> 0.016 mg/L [Acute] 96 Hour(s) NOEC <i>Fathead minnow</i> 0.0019 mg/L [Chronic] NOEC <i>Sheepshead minnow</i> 0.0059 mg/L [estimated chronic] Aquatic Toxicity-Crustacea: NOEC <i>Daphnia magna</i> 0.00086 mg/L [Chronic] NOEC <i>Mysid shrimp</i> 0.0001 mg/L [Estimated chronic] 96 Hour(s) LC50 <i>Mysid Shrimp</i> 0.0014 mg/L [Acute] 48 Hour(s) LC50 Water Flea <i>Daphnia magna</i> 0.0116 mg/L [Acute]
Piperonyl butoxide (1.6%)	51-03-6	Aquatic Toxicity-Fish: 96 Hour(s) LC50 <i>Rainbow Trout</i> 1.9 mg/L [Acute] 96 Hour(s) LC50 <i>Sheephead minnow</i> 3.94 mg/L [Acute] NOEC <i>Fathead minnow</i> 0.04 mg/L [Chronic] <i>Fathead minnow</i> 0.11 mg/L [Chronic LOEC] Aquatic Toxicity-Crustacea: <i>Daphnia magna</i> 0.047 mg/L [Chronic LOEC] 48 Hour(s) LC50 <i>Daphnia magna</i> 0.51 mg/L [Acute] 48 Hour(s) LC50 <i>Mysid shrimp</i> 0.49 mg/L [Acute] NOEC <i>Daphnia magna</i> 0.03 mg/L [Chronic]

Persistence and degradability

- No data available.

Bioaccumulative potential

- No data available.

Mobility in Soil

- No data available.

Other adverse effects**Potential Environmental Effects**

- This product is extremely toxic to fish and aquatic vertebrates. This product is highly toxic to bees.

Section 13 - Disposal Considerations**Waste treatment methods****Product waste**

- Never place unused product down any indoor or outdoor drain. Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Packaging waste

- If empty: Nonrefillable container. Do not reuse or refill container. Offer for recycling, if available. If partly filled: Call your local solid waste agency for disposal instructions. Never place unused product down any indoor or outdoor drain. Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Section 14 - Transport Information

	UN number	UN proper shipping name	Transport hazard class(es)	Packing group	Environmental hazards
DOT	UN3082	Packages 500 lbs.or greater: Environmentally hazardous substance, liquid, n.o.s. (Pyrethrins, Cypermethrin)	9	III	RQ: Pyrethrins = 1 lb.
IMO/IMDG	UN 3082	Packaging 5 L or greater: Environmentally Hazardous Substance, liquid, n.o.s. (Pyrethrins, Cypermethrin)	9	III	Marine Pollutant
IATA/ICAO	UN 3082	Packaging 5 L or greater: Environmentally Hazardous Substance, liquid, N.O.S. (Pyrethrins, Cypermethrin)	9	III	Acute Aquatic Toxicity

Special precautions for user • None specified.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code • No data available

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 chemical 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.

CAUTION

Precautionary Statements • KEEP OUT OF REACH OF CHILDREN

Hazards to Humans and Domestic Animals

HAZARDS TO HUMANS AND DOMESTIC ANIMALS CAUTION HUMANS: Harmful if inhaled. Avoid breathing spray mist. Causes moderate eye irritation. Avoid contact with skin eyes or clothing. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Wear long sleeved shirt and long pants, socks and shoes and chemical-resistant gloves made of any waterproof material. HORSES: Do not allow product to contact animal's eyes, nose, mouth, or sores during application. Do not use on foals under 12 weeks. Use only in well-ventilated areas. User Safety Recommendations: User should wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet. User should remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Users should remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

First Aid •

IF INHALED • Move person to fresh air • If person is not breathing call 911 or an ambulance • Call a poison control center or doctor immediately for treatment advice then give artificial respiration, preferably by mouth-to-mouth, if possible • Call a poison control center or doctor for further treatment advice IF IN 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 eye • Call a poison control center or doctor for treatment advice IF ON SKIN OR CLOTHING • Take off contaminated clothing • Rinse skin immediately with plenty of water for 15-20 minutes • Call a poison control center or doctor immediately for treatment advice IF SWALLOWED • Have person sip a glass of water if able to swallow • Do not induce vomiting unless told to do so by the poison control center or doctor • Do not give anything by mouth to an unconscious person

Environmental Hazards •

This pesticide is extremely toxic to aquatic organisms, including fish and invertebrates. To protect the environment, do not allow pesticide to enter or run off into storm drains, drainage ditches, gutters or surface waters. Applying this product in calm weather when rain is not predicted for the next 24 hours will help to ensure that wind or rain does not blow or wash pesticide off the treatment area. Rinsing application equipment over the treated area will help avoid run off to water bodies or drainage systems. This pesticide is highly toxic to bees exposed to direct treatment on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds while bees are actively visiting the treatment area.

Inventory		
Component	CAS	TSCA
Cypermethrin	52315-07-8	No
Piperonyl butoxide	51-03-6	Yes
Butoxypolypropylene glycol	9003-13-8	Yes
Pyrethrin	8003-34-7	No

United States

Environment

U.S. - CERCLA/SARA - Hazardous Substances and their Reportable Quantities

• Cypermethrin	52315-07-8	Not Listed
• Butoxypolypropylene glycol	9003-13-8	Not Listed
• Pyrethrin	8003-34-7	1 lb final RQ (listed under Pyrethrins); 0.454 kg final RQ (listed under Pyrethrins)
• Piperonyl butoxide	51-03-6	Not Listed

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

• Cypermethrin	52315-07-8	Not Listed
• Butoxypolypropylene glycol	9003-13-8	Not Listed
• Pyrethrin	8003-34-7	Not Listed
• Piperonyl butoxide	51-03-6	1.0 % de minimis concentration

Section 16 - Other Information

Revision Summary

Revision Date	MSDS Number	Changes
22/February/2018		• Section 14 changed. Updated DOT shipping description

Revision Date

- 22/February/2018

Last Revision Date

- 08/September/2016

Preparation Date

- 16/February/2015

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.