



Endure Roll-On For Horses

Safety Data Sheet

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Version: 1.1

SECTION 1: Identification

1.1. Identification

Product form : Mixture
Name : Endure Roll-On For Horses
Synonyms : 3005333, EPA Reg. No. 270-253, Farnam Crash! Wipe-On Insecticide/Repellent

1.2. Recommended use and restrictions on use

Recommended use : Insecticide. Repellent.
Restrictions on use : Keep out of reach of children. Avoid contact with eyes, skin or clothing.

1.3. Supplier

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

www.farnam.com

1.4. Emergency telephone number

Emergency number : 1-800-234-2269
1-800-424-9300 - CHEMTREC
1-703-527-3887 - CHEMTREC - Outside North America - Collect Calls Accepted

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS US classification

Serious eye damage/eye irritation Category 2B Causes eye irritation
Skin sensitization, Category 1 May cause an allergic skin reaction

2.2. GHS Label elements, including precautionary statements

GHS US labeling

Hazard pictograms (GHS US) :



GHS07

Signal word (GHS US) : Warning
Hazard statements (GHS US) : May cause an allergic skin reaction
Causes eye irritation
Precautionary statements (GHS US) : Avoid breathing dust/fume/gas/mist/vapors/spray.
Wash hands, forearms and face thoroughly after handling.
Contaminated work clothing must not be allowed out of the workplace.
Wear protective gloves/protective clothing/eye protection/face protection.
IF ON SKIN: Wash with plenty of water.
If skin irritation or rash occurs: Get medical advice/attention.
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.
Wash contaminated clothing before reuse.
Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

2.3. Other hazards which do not result in classification

Other hazards which do not result in classification : This product is extremely toxic to fish and aquatic invertebrates. This product is highly toxic to bees exposed to direct treatment on blooming crops or weeds. Under United States Regulations (29 CFR 1910.1200 - Hazard Communication Standard), this product is considered hazardous.

2.4. Unknown acute toxicity (GHS US)

Not applicable

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SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%
Cypermethrin	(CAS-No.) 52315-07-8	0.15
Pyrethrins	(CAS-No.) 8003-34-7	0.2
Piperonyl butoxide	(CAS-No.) 51-03-6	1.63
Di-n-propyl Isocinchomeronate	(CAS-No.) 136-45-8	0.5
Butoxy Polypropylene Glycol	(CAS-No.) 9003-13-8	4.85
Glycerine	(CAS-No.) 56-81-5	3.5
Imidazolidenyl urea	(CAS-No.) 39236-46-9	0.15
Non hazardous ingredients	(CAS-No.) N/A	Balance

SECTION 4: First-aid measures

4.1. Description of first aid measures

- First-aid measures after inhalation : IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.
- First-aid measures after skin contact : IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing. If skin irritation or rash occurs: Get medical advice/attention.
- First-aid measures after eye contact : 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 and attention.
- First-aid measures after ingestion : IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. Rinse mouth. Do NOT induce vomiting unless directed to do so by medical personnel.

4.2. Most important symptoms and effects (acute and delayed)

- Symptoms/effects after skin contact : May cause an allergic reaction in individuals with a sensitivity to cypermethrin and/or imidazolidenyl urea.
- Symptoms/effects after eye contact : Causes mild eye irritation.

4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

- Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.
- Unsuitable extinguishing media : Avoid heavy hose streams.

5.2. Specific hazards arising from the chemical

- Reactivity : The product is non-reactive under normal conditions of use, storage and transport.

5.3. Special protective equipment and precautions for fire-fighters

- Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

- Emergency procedures : Ventilate spillage area. Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapors/spray.

6.1.2. For emergency responders

- Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: Exposure controls/personal protection.
- Emergency procedures : No emergency procedures are expected to be necessary if material is used under ordinary conditions as recommended.

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

- Methods for cleaning up : Absorb spills with an inert material, clay granules or other inert absorbent material and put in container for disposal.

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SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Precautions for safe handling : Ensure good ventilation of the work station. Avoid contact with skin and eyes. Wear personal protective equipment.
- Hygiene measures : Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

- Storage conditions : Protect from sunlight. Keep cool. Avoid extreme temperatures. Keep container tightly closed. Keep only in original container. Store in a well-ventilated place.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Pyrethrins (8003-34-7)		
ACGIH	ACGIH OEL TWA	5 mg/m ³
ACGIH	Remark (ACGIH)	Liver dam; LRT irr
OSHA	OSHA PEL TWA	5 mg/m ³
IDLH	IDLH	5000 mg/m ³
NIOSH	NIOSH REL TWA	5 mg/m ³

Glycerine (56-81-5)		
ACGIH	Remark (ACGIH)	URT irr
OSHA	OSHA PEL TWA	15 mg/m ³ (mist, total particulate) 5 mg/m ³ (mist, respirable fraction)

8.2. Appropriate engineering controls

- Appropriate engineering controls : Adequate ventilation systems as needed to control concentrations of airborne contaminants below applicable threshold limit values.
- Environmental exposure controls : Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Hand protection:

Protective gloves

Eye protection:

Safety glasses

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

Not required for normal conditions of use



SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

- Physical state : Liquid
- Appearance : White to pale yellow opaque liquid
- Color : White to pale yellow
- Odor : Fragrant
- Odor threshold : No data available

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pH	: 6 – 7
Melting point	: Not applicable
Freezing point	: No data available
Boiling point	: No data available
Flash point	: 96.1 °C (205 °F)
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability	: Not applicable
Vapor pressure	: No data available
Relative vapor density at 20°C	: No data available
Relative density	: 1.003 @ 20 °C (68 °F)
Solubility	: Insoluble
Partition coefficient n-octanol/water (Log Pow)	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: 600 – 2500 cP @ 22.5 °C (72.5 °F)
Explosion limits	: No data available
Explosive properties	: Not explosive
Oxidizing properties	: Not applicable

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use. Hazardous polymerization will not occur.

10.4. Conditions to avoid

Avoid extreme temperatures.

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Endure Roll-On For Horses	
LD50 oral rat	> 5000 mg/kg (adult female)
LD50 dermal rat	> 5000 mg/kg
LC50 Inhalation - Rat	> 2.03 mg/l/4h

GHS-US Properties	Classification
Acute toxicity (oral)	Not classified
Acute toxicity (dermal)	Not classified
Acute toxicity (inhalation)	Not classified
Skin corrosion/irritation	Not classified
Serious eye damage/irritation	Causes eye irritation.
Respiratory or skin sensitization	May cause an allergic skin reaction.
Germ cell mutagenicity	Not classified
Carcinogenicity	Not classified
Reproductive toxicity	Not classified

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Specific target organ toxicity (single exposure)	Not classified
Specific target organ toxicity (repeated exposure)	Not classified
Aspiration hazard	Not classified

Potential health effects

Inhalation

Acute : Under normal conditions of use, no health effects are expected.

Skin

Acute : May cause slight skin irritation. May cause an allergic reaction in individuals with a sensitivity to cypermethrin and/or imidazolidenyl urea.

Eye

Acute : Causes mild eye irritation.

Ingestion

Acute : Under normal conditions of use, no health effects are expected.

Mutagenicity

: Cypermethrin is not a mutagen. Pyrethrins were not found to be genotoxic and did not damage DNA in any study conducted which included: Ames assay, chromosome aberration in Chinese hamster ovaries (CHO) cells and in the unscheduled DNA synthesis (UDS) assay in cultured human liver cells. Piperonyl butoxide was not mutagenic in a battery of tests. Di-n-propyl isocinchomeronate is not a mutagen. Butoxy polypropylene glycol is not a mutagen.

Carcinogenicity

: Cypermethrin is not classified as a carcinogen by OSHA, IARC or NTP. Pyrethrins are not listed as a carcinogen by OSHA, IARC, or NTP. Piperonyl butoxide is not classified as a carcinogen by IARC, NTP, OSHA. Di-n-propyl isocinchomeronate is classified by US EPA as a B2-probable human carcinogen, it is not listed by OSHA, IARC or NTP. Butoxy polypropylene glycol is not listed as a carcinogen by OSHA, IARC or NTP.

Reproductive Effects

: Cypermethrin does not cause birth defects or adverse effects on reproduction. Pyrethrins did not produce any birth defects or adverse effects on reproductive parameters in tests with rats and rabbits. Piperonyl butoxide did not produce any birth defects or adverse effects on reproductive parameters in tests with rats and rabbits. Di-n-propyl isocinchomeronate showed adverse effects on reproduction in laboratory animals. Butoxy polypropylene glycol does not cause birth defects.

SECTION 12: Ecological information

12.1. Toxicity

Cypermethrin (52315-07-8)	
LC50 Acute fish 1	0.00039 mg/l (Exposure time: 96h - Rainbow trout)
LC50 Acute fish 2	0.00095 ml/l (Exposure time: 96h - Sheepshead minnow)
LC50 Acute crustacea 1	0.00000475 mg/l (Exposure time: 96h - Mysid shrimp)
LC50 Acute crustacea 2	0.0000036 mg/l (Exposure time: 48h - Hyalella Azteca)
NOEC Chronic fish 1	0.00014 mg/l (Fathead minnow)
NOEC Chronic crustacea 1	0.00000078 mg/l (Mysid shrimp)
Pyrethrins (8003-34-7)	
LC50 Acute fish 1	0.0051 mg/l (Exposure time: 96h - Rainbow trout)
LC50 Acute fish 2	0.016 mg/l (Exposure time: 96h - Sheepshead minnow)
LC50 Acute crustacea 1	0.0014 mg/l (Exposure time: 96h - Mysid shrimp)
LC50 Acute crustacea 2	0.0116 mg/l (Exposure time: 48h Daphnia)
NOEC Chronic fish 1	0.0019 mg/l (Fathead minnow)
NOEC Chronic fish 2	0.0059 mg/l (Sheepshead minnow - Estimated)
NOEC Chronic crustacea 1	0.00086 mg/l (Daphnia magna)
NOEC Chronic crustacea 2	0.0001 mg/l (Mysid shrimp - Estimated)
Piperonyl butoxide (51-03-6)	
LC50 Acute fish 1	1.9 mg/l (Rainbow trout)
LC50 Acute fish 2	3.94 mg/l (Sheepshead minnow)
LC50 Acute crustacea 1	0.49 mg/l (Mysid shrimp)
LC50 Acute crustacea 2	0.51 mg/l (Gammarus fasciatus (amphipod))
NOEC Chronic fish 1	0.04 mg/l (Fathead minnow)
NOEC Chronic crustacea 1	0.03 mg/l (Daphnia magna)
Di-n-propyl Isocinchomeronate (136-45-8)	
LC50 Acute fish 1	1 mg/l (Exposure time: na - Rainbow trout)
LC50 Acute fish 2	0.44 mg/l (Exposure time: 96h - Blue gill)

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Di-n-propyl Isocinchomeronate (136-45-8)

LC50 Acute crustacea 1 18 mg/l (Exposure time: 48h Daphnia)

12.2. Persistence and degradability

Pyrethrins (8003-34-7)

Persistence and degradability Pyrethrins have low persistence in the environment due to rapid breakdown in presence of UV light.

12.3. Bioaccumulative potential

No data available

12.4. Mobility in soil

No data available

12.5. Other adverse effects

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

SECTION 13: Disposal considerations

13.1. Disposal methods

Product/Packaging disposal recommendations : Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

SECTION 14: Transport information

	UN number	Proper Shipping Name	Transport hazard class(es)	Packing group	Environmental hazards
DOT	UN3082	Packaging greater than 500 lbs.: Environmentally hazardous substance, liquid, n.o.s (Pyrethrins and Cypermethrin)	9	III	RQ = Pyrethrins 1 lb.
IMDG	UN3082	Packaging greater than 5 L.: Environmentally hazardous substance, liquid, n.o.s (Pyrethrins and Cypermethrin)	9	III	Marine pollutant
IATA	UN3082	Packaging greater than 5 L.: Environmentally hazardous substance, liquid, n.o.s (Pyrethrins and Cypermethrin)	9	III	Acute aquatic toxicity

SECTION 15: Regulatory information

15.1. US Federal regulations

Pyrethrins (8003-34-7)

CERCLA RQ 1 lb listed under Pyrethrins

Piperonyl butoxide (51-03-6)

Listed on the United States TSCA (Toxic Substances Control Act) inventory
Subject to reporting requirements of United States SARA Section 313

SARA Section 313 - Emission Reporting 1 %

Di-n-propyl Isocinchomeronate (136-45-8)

Subject to reporting requirements of United States SARA Section 313

SARA Section 313 - Emission Reporting 1 %

Butoxy Polypropylene Glycol (9003-13-8)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

EPA TSCA Regulatory Flag XU - XU - indicates a substance exempt from reporting under the Chemical Data Reporting Rule, (40 CFR 711).

Glycerine (56-81-5)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

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Imidazolidenyl urea (39236-46-9)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
EPA Labelling	
EPA Registration Number	270-253
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.	
FIFRA Hazard statements	Caution
FIFRA Precautionary statements	KEEP OUT OF REACH OF CHILDREN.
FIFRA Hazards to Humans and Domestic Animals	For use on horses and ponies only. Not for use on humans. Harmful if absorbed through skin or inhaled. Contact with this product may cause transitory tingling sensation. Avoid contact with skin, eyes or clothing. Avoid breathing vapors. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet.
FIFRA First aid	If on skin or clothing: If you suspect a reaction to this product: Discontinue use. Rinse skin immediately with plenty of water for 15-20 minutes. Call a Poison Control Center or doctor for treatment advice. If inhaled: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferable mouth-to-mouth if possible. Call 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 eyes. Call a poison control center or doctor for treatment advice. If swallowed: Immediately call a poison control center or doctor. Do not induce vomiting unless told to do so by a poison control center or doctor. Have person sip a glass of water if able to swallow. Do not give anything by mouth to an unconscious person.
FIFRA Environmental hazards	This product is extremely toxic to fish and aquatic invertebrates. Do not apply directly to or near water. Drift and run-off may be hazardous to fish in water adjacent to treated areas. Do not contaminate water when disposing of equipment washwater, or rinsate. See Directions for Use for additional requirements. This product 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.

15.2. US State regulations

No additional information available

SECTION 16: Other information

Issue date : 21 September 2016
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Indication of changes:

Revised Sec. 11: Toxicological information.

SDS US (GHS HazCom 2012) - CGP

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