



Safety Data Sheet

Section 1: Identification

Product identifier

Product Name

- **Farnam Equi-Spot Spot-On Protection for Horses**

Synonyms

- 100506084; 100521975; 100524294; EPA Reg. No.: 270-279; Equi-Spot Spot-On Fly Control for Horses

Product Description

- Clear pale yellow to amber oily liquid.

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

Recommended use

- Insect repellent for horses.

Restrictions on use

- Keep out of reach of children. Avoid release to the environment. Avoid contact with skin, eyes, or clothing. Keep away from heat, sparks and flames. For external use only. Intended for horses only. Do NOT use on cats.

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

- Acute Toxicity Oral 4
Specific Target Organ Toxicity Single Exposure 1
Eye Mild Irritation 2B
Aspiration 1
Flammable Liquids 3
Skin Sensitization 1

Label elements

OSHA HCS 2012**DANGER**

- Hazard statements** • Harmful if swallowed
 Causes damage to organs - nervous system.
 Flammable liquid and vapor
 May be fatal if swallowed and enters airways
 Causes eye irritation
 May cause an allergic skin reaction

Precautionary statements

- Prevention** • Do not eat, drink or smoke when using this product.
 Wash thoroughly after handling.
 Keep away from heat, sparks, open flames and/or hot surfaces. - No smoking.
 Wear protective gloves/protective clothing/eye protection/face protection.
 Keep container tightly closed.
 Ground and/or bond container and receiving equipment.
 Use only non-sparking tools.
 Use explosion-proof electrical/ventilating/lighting/equipment.
 Take precautionary measures against static discharge.
 Do not breathe dust, fume, gas, mist, vapors and/or spray.
 Contaminated work clothing should not be allowed out of the workplace.

- Response** • IF exposed: Call POISON CENTER or doctor/physician.
 In case of fire: Use appropriate media water fog, foam, carbon dioxide, or dry chemical for extinction.
 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
 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 SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
 Rinse mouth.
 Do NOT induce vomiting.
 If skin irritation or rash occurs: Get medical advice/attention.
 Wash contaminated clothing before reuse.
 Specific treatment, see supplemental first aid information in Section 4 - First Aid Measures.

- Storage/Disposal** • Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.
 Avoid release to the environment.
 Store locked up.
 Store in a well-ventilated place. Keep cool.

Other hazards**OSHA HCS 2012**

- Under United States Regulations (29 CFR 1910.1200 - Hazard Communication Standard), this product is considered hazardous. 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 according to United Nations Globally Harmonized System of Classification and Labeling of Chemicals (GHS)

Mixtures

Composition		
Chemical Name	Identifiers	%
Permethrin	CAS:52645-53-1	45%
Mineral oil, white	CAS:8042-47-5	12.53%
D-Limonene	CAS:5989-27-5	34.2%
Other ingredients	NDA	8.27%

Section 4: First-Aid Measures

Description of first aid measures

Inhalation

- IF INHALED: If breathing is difficult, remove person to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.

Skin

- IF ON SKIN: Wash with plenty of soap and water. Get medical attention if symptoms occur.

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 damage to organs - nervous system. Harmful if swallowed, causes skin irritation, aspiration hazard. An allergic skin reaction may occur in individuals with a sensitivity to D-Limonene. 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 • Avoid heavy hose streams.

Media**Firefighting Procedures**

- Do not use direct stream of water. A direct stream of water may spread fire. 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**

- Flammable/combustible material.

Hazardous Combustion Products

- Flammable liquid - may release carbon dioxide and/or carbon monoxide upon heating.

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 breathing fumes. Wear appropriate personal protective equipment, avoid direct contact. Keep all sources of ignition away. Do not walk through spilled material. Avoid contact with skin, eyes, and clothing.

Emergency Procedures

- ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Stop leak if you can do it without risk. Use normal clean up procedures. Keep unauthorized personnel away. Stay upwind. Take precautionary measures against static discharge. Turn off electric power to area. Ventilate closed spaces before entering.

Environmental precautions

- LARGE SPILLS: Prevent entry into waterways, sewers, basements or confined areas.

Methods and material for containment and cleaning up**Containment/Clean-up Measures**

- Cover liquid spill with sand, earth or other non-combustible absorbent material.

Section 7 - Handling and Storage**Precautions for safe handling****Handling**

- Handle and open container with care. Avoid release to the environment. Use only in well ventilated areas. Wash thoroughly with soap and water after handling and before eating, drinking, or using tobacco. Wear appropriate personal protective equipment, avoid direct contact. Do not use or store near heat or open flame. Use only with adequate ventilation. Wash thoroughly after handling. Do not breathe dust/vapor/spray/mist.

Conditions for safe storage, including any incompatibilities**Storage**

- Store locked up. Keep from freezing. Store away from oxidizers strong acids and strong bases. Keep away from fire. Keep container tightly closed. Avoid long term exposure to air. Store in a well ventilated place.

Incompatible Materials or Ignition Sources

- Strong acids, strong bases, and oxidizing agents. Heat, sparks, open flame.

Other Information

- See product label for additional information.

Section 8 - Exposure Controls/Personal Protection

Control parameters

Exposure controls

Engineering Measures/Controls

- Adequate ventilation systems as needed to control concentrations of airborne contaminants below applicable threshold limit values.

Personal Protective Equipment

Pictograms



Respiratory

- Not required with normal use.

Eye/Face

- Wear safety glasses.

Skin/Body

- Wear protective gloves (chemical-resistant). If prolonged exposure is anticipated, it is recommended for handlers to wear appropriate clothing to prevent skin contact.

Environmental Exposure Controls

- Avoid contaminating waterways and sewers.

Other Information

- See product label for additional information.

Section 9 - Physical and Chemical Properties

Information on Physical and Chemical Properties

Material Description			
Physical Form	Liquid	Appearance/Description	Clear pale yellow to amber liquid.
Color	Clear to pale yellow to amber.	Odor	Citrus
General Properties			
Boiling Point	No data available	Melting Point/Freezing Point	No data available
Decomposition Temperature	No data available	pH	No data available
Specific Gravity/Relative Density	8.2 lb/gal	Water Solubility	Insoluble
Viscosity	< 100 Centipoise (cPs, cP) or mPas		
Volatility			
Vapor Pressure	No data available	Vapor Density	No data available
Evaporation Rate	No data available		
Flammability			
Flash Point	56 °C(132.8 °F)	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

- Non-reactive under normal handling and storage conditions.

Chemical stability

- Stable under normal temperatures and pressures.

Possibility of hazardous reactions

- Hazardous polymerization will not occur.

Conditions to avoid

- Avoid storage with or near toxic substances. Direct sunlight. Excessive heat >110°F. Heat, sparks, open flame, other ignition sources, and oxidizing conditions. Keep away from fire.

Incompatible materials

- Heat, strong acids, strong bases and oxidizing agents.

Hazardous decomposition products

- Thermal decomposition may produce toxic gases.

Section 11 - Toxicological Information

Information on toxicological effects

	CAS	
Farnam Equi-Spot Spot-On Protection for Horses	NDA	Acute Toxicity: Ingestion/Oral-Rat, adult female LD50 • 1660 mg/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 4
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 • Skin Sensitizer 1
Respiratory sensitization	OSHA HCS 2012 • Classification criteria not met
Aspiration Hazard	OSHA HCS 2012 • Aspiration 1
Carcinogenicity	OSHA HCS 2012 • Classification criteria not met
Germ Cell Mutagenicity	OSHA HCS 2012 • Not classified - data lacking
Toxicity for Reproduction	OSHA HCS 2012 • Classification criteria not met
STOT-SE	OSHA HCS 2012 • Specific Target Organ Toxicity Single Exposure 1
STOT-RE	OSHA HCS 2012 • Classification criteria not met

Route(s) of entry/exposure • Inhalation, skin, eye, and ingestion.

Potential Health Effects

Inhalation

Acute (Immediate)	<ul style="list-style-type: none"> Harmful if inhaled. Permethrin affects nervous system. Symptoms of overexposure to permethrin include diarrhea, salivation, tremors, convulsions, hyperactivity and hypersensitivity.
Chronic (Delayed)	<ul style="list-style-type: none"> No data available
Skin	
Acute (Immediate)	<ul style="list-style-type: none"> May cause an allergic reaction in individuals with a sensitivity to D-Limonene.
Chronic (Delayed)	<ul style="list-style-type: none"> No data available
Eye	
Acute (Immediate)	<ul style="list-style-type: none"> Causes eye irritation.
Chronic (Delayed)	<ul style="list-style-type: none"> No data available
Ingestion	
Acute (Immediate)	<ul style="list-style-type: none"> Harmful if ingested. Permethrin affects nervous system. Symptoms of overexposure to permethrin include diarrhea, salivation, tremors, convulsions, hyperactivity and hypersensitivity. Aspiration Hazard.
Chronic (Delayed)	<ul style="list-style-type: none"> No data available
Mutagenic Effects	
	<ul style="list-style-type: none"> Active Ingredient: Permethrin did not produce any mutagenic effects when tested in the Ames assay.
Carcinogenic Effects	
	<ul style="list-style-type: none"> Active Ingredient: A statistically significant increase in the incidence of lung and liver tumors was observed in female mice receiving diets containing 375 and 750 mg/kg/day of permethrin technical over 85 weeks. Permethrin is not classified as carcinogen by NTP, IARC and OSHA.
Reproductive Effects	
	<ul style="list-style-type: none"> Active Ingredient: Developmental Toxicity: Permethrin was not teratogenic when tested in rats.

Section 12 - Ecological Information

Toxicity

Components		
Permethrin (45%)	52645-53-1	Aquatic Toxicity-Fish: 96 Hour(s) LC50 <i>Blue gill</i> 0.00079 mg/L [Acute] 96 Hour(s) LC50 <i>Atlantic silverside</i> 0.0022 mg/L [Acute] NOEC <i>Fathead minnow</i> 0.0003 mg/L [Chronic] NOEC <i>Sheepshead minnow</i> 0.00083 mg/L [Chronic] Aquatic Toxicity-Crustacea: NOEC <i>Daphnia magna</i> 0.000039 mg/L [Chronic] NOEC <i>Mysid shrimp</i> 0.000011 mg/L [Chronic] LC50 <i>Hexagenia bilineata</i> 0.0001 mg/L [Acute] 96 Hour(s) LC50 <i>Mysid shrimp</i> 0.000019 mg/L [Acute]

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 toxic to aquatic organisms, including fish and invertebrates. This product is highly toxic to bees exposed to direct treatment. Care should be taken to avoid contamination of the environment.

Section 13 - Disposal Considerations

Waste treatment methods

Product waste

- Dispose of content and/or container in accordance with local, regional, national, and/or international regulations. Do not allow entry into storm drains, drainage ditches, gutters or surface waters. Never place unused product down any indoor or outdoor drain.

Packaging waste

- Dispose of content and/or container in accordance with local, regional, national, and/or international regulations. Do NOT wash away into sewer. Do not reuse or refill container. If empty, place in trash or offer for recycling if available.

Section 14 - Transport Information

	UN number	UN proper shipping name	Transport hazard class(es)	Packing group	Environmental hazards
DOT	Not Applicable	Inner packaging 5L or less: Limited quantity.	Not Applicable	Not Applicable	Not Applicable
	UN2319	Inner packaging > 5 L: Terpene Hydrocarbons, n.o.s. (d-Limonene)	3	III	Not Applicable
IMO/IMDG	UN2319	Terpene Hydrocarbons, n.o.s (d-Limonene)	3	III	Marine Pollutant
IATA/ICAO	UN2319	Terpene Hydrocarbons, n.o.s (d-Limonene)	3	III	Not Applicable

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, Acute

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

Hazard Statements • KEEP OUT OF REACH OF CHILDREN
DO NOT USE ON CATS

Precautionary Statements •

Hazards to Humans and Domestic Animals

HAZARDS TO HUMANS AND DOMESTIC ANIMALS CAUTION Hazards to Humans: Harmful if swallowed or absorbed through skin. Causes moderate eye irritation. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco. Wear long-sleeved shirt and long pants, socks, shoes, and gloves. Remove and wash contaminated clothing before reuse. Wear protective eyewear. Hazards to Domestic Animals: DO NOT USE ON CATS. May be toxic and potentially fatal if applied to or ingested by cats. FOR EXTERNAL USE ON HORSES ONLY. Do not use on foals under 12 weeks of age. Consult a veterinarian before using this product on debilitated, aged, medicated, pregnant, or nursing horses. Consult a veterinarian before using on horses with known organ dysfunction. DO NOT USE ON CATS or animals other than horses. Certain medications can interact with pesticides. It is advisable to consult a veterinarian before using this product with any other pesticide or drug.

First Aid •

IF SWALLOWED: • Immediately call a poison control center or doctor. • Do not induce vomiting unless told to do so by the poison control center or doctor. • Do not give any liquid to the person. • Do not give anything by mouth to an unconscious person. IF IN EYES: • Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after 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 for treatment advice.

Adverse Reactions: Some animals may be sensitive to ingredients in this product. Reactions in horses may include skin sensitivity. Horses may show lethargy, increased pruritus (itchiness), erythema (redness), rash and hair discoloration or hair loss at the application site. Observe the horse following treatment. Sensitivity may occur after using ANY pesticide product on horses. If signs of sensitivity occur bathe your horse with a mild, non-insecticidal shampoo and rinse with large amounts of water. If signs continue, consult a veterinarian immediately and report incident to company at 1-800-234-2269.

Inventory		
Component	CAS	TSCA
D-Limonene	5989-27-5	Yes
Mineral oil, white	8042-47-5	Yes
Permethrin	52645-53-1	No

United States

Environment

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

• Mineral oil, white	8042-47-5	Not Listed
• D-Limonene	5989-27-5	Not Listed
• Permethrin	52645-53-1	1.0 % de minimis concentration

Section 16 - Other Information**Revision Summary**

Revision Date	MSDS Number	Changes
27/September/2016		<ul style="list-style-type: none"> • Section 1 changed. Added additional SKU number • Section 14 changed. Updated shipping descriptions

Revision Date

- 27/September/2016

Last Revision Date

- 01/April/2015

Preparation Date

- 01/April/2015

Disclaimer/Statement of Liability

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