

SAFETY DATA SHEETS

This SDS packet was issued with item:

078923279

N/A

MATERIAL SAFETY DATA SHEET
BRONCO EQUINE FLY SPRAY PLUS
CITRONELLA SCENT

Page: 1
Printed: 10/06/2011
Revision: 10/06/2011
Supercedes Revision: 05/18/2010

1. Product and Company Identification

Product Code: 270-294-A
Product Name: BRONCO EQUINE FLY SPRAY PLUS CITRONELLA SCENT
Manufacturer Information
Company Name: Distributed by:
Farnam Companies, Inc.
301 West Osborn Road
Phoenix, AZ
Emergency Contact: Animal or human exposure (800)234-2269
Alternate Emergency Contact: CHEMTREC (Emergency spills) (800)424-9300
Information: Farnam Companies (800)234-2269
Chemical Family: compound
Additional Identity Information
1 qt 14810
1 gal 14805

2. Composition/Information on Ingredients

Hazardous Components (Chemical Name)	CAS #	Concentration	OSHA PEL	ACGIH TLV
1. Pyrethrins and Pyrethroids	8003-34-7	0.05 %	No data.	No data.
2. Piperonyl butoxide	51-03-6	0.5 %	No data.	No data.
3. Permethrin	52645-53-1	0.1 %	No data.	No data.

3. Hazards Identification

Emergency Overview

KEEP OUT OF REACH OF CHILDREN

Route(s) of Entry: Inhalation? Yes Skin? Yes Eyes? Yes Ingestion? Yes

Potential Health Effects (Acute and Chronic)

No data available.

LD 50 / LC 50

oral>5g/kg; dermal>2g/kg; LC50 >3.55mg/l

Signs and Symptoms Of Exposure

None known

Medical Conditions Generally Aggravated By Exposure

None known

4. First Aid Measures

Emergency and First Aid Procedures

IF SWALLOWED: 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 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 the first 5 minutes, then continue rinsing eye. 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, preferably mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.

IF ON 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.

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5. Fire Fighting Measures

Flash Pt: > 200.00 F

Explosive Limits: LEL: No data. UEL: No data.

Autoignition Pt: NA

Fire Fighting Instructions
None

Flammable Properties and Hazards
None known

Hazardous Combustion Products
None known

Extinguishing Media
No data available.

Unsuitable Extinguishing Media
None known

6. Accidental Release Measures

Steps To Be Taken In Case Material Is Released Or Spilled

Soak up with absorbent material such as sand or sawdust and discard with chemical waste.

7. Handling and Storage

Precautions To Be Taken in Handling

Avoid breathing spray mist. Avoid contact with eyes, skin or clothing. Harmful if swallowed.

Precautions To Be Taken in Storing

Store in a cool, dry place. Do not store near heat or open flame.

8. Exposure Controls/Personal Protection

Respiratory Equipment (Specify Type)

none usually

Eye Protection

none

Protective Gloves

none

Other Protective Clothing

none

Engineering Controls (Ventilation etc.)

Local Exhaust: sufficient

Special:

Mechanical (Gen):

Other:

Work/Hygienic/Maintenance Practices

Wash hands before eating, smoking or using restroom.

9. Physical and Chemical Properties

Physical States: [] Gas [X] Liquid [] Solid

Melting Point: No data.

Boiling Point: 100.00 C

Autoignition Pt: NA

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Flash Pt: > 200.00 F
Specific Gravity (Water = 1): 1.002 at 25.0 C
Vapor Pressure (vs. Air or mm Hg): No data.
Vapor Density (vs. Air = 1): No data.
Evaporation Rate: No data.
Solubility in Water: No data.

Solubility Notes

soluble

Percent Volatile: No data.

pH: 7.0

Appearance and Odor

Light amber to clear, slight oily with citronella scent.

10. Stability and Reactivity

Stability: Unstable [] Stable [X]

Conditions To Avoid - Instability

No data available.

Incompatibility - Materials To Avoid

No data available.

Hazardous Decomposition Or Byproducts

None known

Hazardous Polymerization: Will occur [] Will not occur [X]

Conditions To Avoid - Hazardous Polymerization

No data available.

11. Toxicological Information

Not available

Chronic Toxicological Effects

No data available.

Hazardous Components (Chemical Name)	CAS #	NTP	IARC	ACGIH	OSHA
1. Pyrethrins and Pyrethroids	8003-34-7	n.a.	n.a.	A4	n.a.
2. Piperonyl butoxide	51-03-6	n.a.	n.a.	n.a.	n.a.
3. Permethrin	52645-53-1	n.a.	n.a.	n.a.	n.a.

12. Ecological Information

This product is extremely toxic to fish. Do not apply directly to any body of water. Do not contaminate water when disposing of equipment washwaters.

13. Disposal Considerations

Waste Disposal Method

If empty: Do not reuse this container. Place in trash or 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.

14. Transport Information

LAND TRANSPORT (US DOT)

DOT Proper Shipping Name Not regulated as hazardous by U.S. DOT.

DOT Hazard Label: None

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Additional Transport Information

No data available.

15. Regulatory Information

No data available.

16. Other Information

Company Policy or Disclaimer

The information and data herein are believed to be accurate and have been compiled from sources believed to be reliable. It is offered for your consideration, investigation and verification.



Safety Data Sheet

Section 1: Identification

Product identifier

Product Name

- **Bronco[®] Equine Fly Spray Plus Citronella Scent**

Synonyms

- 100502327; 100502328; 100532239; EPA Reg. No.: 270-329

Product Description

- Clear colorless liquid.

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

Recommended use

- Insecticide.

Restrictions on use

- Avoid contact with skin and eyes. Keep out of reach of children and pets.

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

- Skin Sensitization 1

Label elements

OSHA HCS 2012

WARNING



Hazard statements • May cause an allergic skin reaction

Precautionary statements

Prevention • Avoid breathing dust, fume, gas, mist, vapors and/or spray.
Contaminated work clothing should not be allowed out of the workplace.

Wear protective gloves.

- Response** • IF ON SKIN: Wash with plenty of soap and water.
If skin irritation or rash occurs: Get medical advice/attention.
Wash contaminated clothing before reuse.

- Storage/Disposal** • Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Other hazards

OSHA HCS 2012

- This product is extremely toxic to aquatic organisms, including fish and invertebrates. This product is extremely 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 not considered hazardous.

Section 3 - Composition/Information on Ingredients

Substances

- Material does not meet the criteria of a substance.

Mixtures

Composition		
Chemical Name	Identifiers	%
Prallethrin	CAS:23031-36-9	0.033%
Permethrin	CAS:52645-53-1	0.1%
Piperonyl butoxide	CAS:51-03-6	0.5%
Other ingredients	NDA	Balance

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 physician if symptoms persist.

Skin

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

Eye

- IF IN EYES: Rinse with water for several minutes. Get medical attention if symptoms occur.

Ingestion

- IF SWALLOWED: Do not induce vomiting unless told to by a poison control center or doctor. Rinse mouth. Get medical attention if symptoms occur.

Most important symptoms and effects, both acute and delayed

- An allergic skin reaction may occur in individuals with a sensitivity to piperonyl

butoxide. 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 • In case of fire use media as appropriate for surrounding fire.

Unsuitable Extinguishing Media • None known.

Special hazards arising from the substance or mixture

Unusual Fire and Explosion Hazards • None known.

Hazardous Combustion Products • None known.

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

- Use appropriate Personal Protective Equipment (PPE). Ventilate enclosed areas. Wash thoroughly with soap and water after handling.

Emergency Procedures • Ventilate closed spaces before entering. Avoid release into the environment.

Environmental precautions

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

Methods and material for containment and cleaning up

Containment/Clean-up Measures

- Stop leak if you can do it without risk.
SMALL SPILLS: Take up with sand or other non-combustible absorbent material and place into containers for later disposal.
LARGE SPILLS: Dike far ahead of spill for later disposal.

Section 7 - Handling and Storage

Precautions for safe handling

Handling • Use good safety and industrial hygiene practices. Avoid contact with skin or eyes.

Conditions for safe storage, including any incompatibilities

Storage

- Keep this product in its tightly closed original container, when not in use. Store in a cool, dry area that is inaccessible to children and pets. Protect from freezing or high temperatures.

Section 8 - Exposure Controls/Personal Protection

Control parameters

Exposure controls

Engineering

- No data available.

Measures/Controls

Personal Protective Equipment

Pictograms



Respiratory

- Not required with normal use.

Eye/Face

- Not required with normal use.

Hands

- Wear protective gloves.

Skin/Body

- It is recommended for handlers to wear appropriate clothing to prevent skin contact including long sleeves, long pants, socks and shoes.

Environmental Exposure Controls

- Avoid release to the environment.

Section 9 - Physical and Chemical Properties

Information on Physical and Chemical Properties

Material Description			
Physical Form	Liquid	Appearance/Description	Clear colorless liquid.
Color	Colorless	Odor	Sweet citrus.
Odor Threshold	No data available		
General Properties			
Boiling Point	No data available	Melting Point/Freezing Point	No data available
Decomposition Temperature	No data available	pH	8.2
Specific Gravity/Relative Density	= 1.001 @ 20 °C(68 °F) Water=1	Water Solubility	No data available
Viscosity	< 10 Centipoise (cPs, cP) or mPas @ 25 °C(77 °F)		
Volatility			
Vapor Pressure	No data available	Vapor Density	No data available
Evaporation Rate	No data available		
Flammability			
Flash Point	> 200 °C(> 392 °F) TCC (Tagliabue Closed Cup)	UEL	No data available
LEL	No data available	Autoignition	No data available
Flammability (solid, gas)	Not Flammable.		
Environmental			
Octanol/Water Partition coefficient	No data available		

Section 10: Stability and Reactivity

Reactivity

- No dangerous reaction known under conditions of normal use.

Chemical stability

- Stable under normal temperatures and pressures.

Possibility of hazardous reactions

- Hazardous polymerization will not occur.

Conditions to avoid

- No data available.

Incompatible materials

- No data available.

Hazardous decomposition products

- No data available.

Section 11 - Toxicological Information

Information on toxicological effects

	CAS	
Broncoe Equine Fly Spray Plus Citronella Scent	NDA	Irritation: Eye-Rabbit • Essentially non-irritating; 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 • Classification criteria not met
Skin sensitization	OSHA HCS 2012 • Skin Sensitizer 1
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

Route(s) of entry/exposure • Inhalation, Ingestion, Eyes, and Skin

Potential Health Effects

Inhalation

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

Skin

- Acute (Immediate)** • May cause an allergic reaction in individuals with a sensitivity to piperonyl butoxide.
- Chronic (Delayed)** • No data available

Eye

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

Ingestion

- Acute (Immediate)**
 - Chronic (Delayed)**
 - Mutagenic Effects**
 - Carcinogenic Effects**
 - Reproductive Effects**
- Under normal conditions of use, no health effects are expected.
 - No data available.
 - Prallethrin is not a mutagen. Permethrin was not mutagenic in a battery of in vitro and in vivo tests. Piperonyl butoxide was not mutagenic in a battery of tests.
 - Prallethrin is not classified as carcinogen by NTP, IARC and OSHA. Permethrin is not classified as carcinogen by NTP, IARC and OSHA. Piperonyl butoxide is not classified as carcinogen by NTP, IARC and OSHA. No other components present at 0.1% or greater are listed by IARC, OSHA or NTP.
 - Prallethrin is not a reproductive toxicant. Permethrin does not cause developmental or reproductive effects. Piperonyl butoxide did not produce any birth defects or adverse effects on reproductive parameters in tests with rats and rabbits.

Section 12 - Ecological Information

Toxicity

Components		
Prallethrin (0.033%)	23031-36-9	Aquatic Toxicity-Fish: 96 Hour(s) LC50 <i>Rainbow Trout</i> 0.012 mg/L [Acute] 96 Hour(s) LC50 <i>Blue Gill</i> 0.022 mg/L [Acute] 96 Hour(s) LC50 <i>Sheepshead Minnow</i> 0.026 mg/L [Acute] NOEC <i>Rainbow Trout</i> 0.003 mg/L [Chronic] Aquatic Toxicity-Crustacea: NOEC <i>Daphnia magna</i> 0.00065 mg/L [Chronic] 48 Hour(s) LC50 <i>Daphnia magna</i> 0.0062 mg/L [Acute]
Permethrin (0.1%)	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]
Piperonyl butoxide (0.5%)	51-03-6	Aquatic Toxicity-Fish: LC50 <i>Rainbow Trout</i> 1.9 mg/L [Acute] LC50 <i>Sheepshead minnow</i> 3.94 mg/L [Acute] NOEC <i>Fathead minnow</i> 0.04 mg/L [Chronic] Aquatic Toxicity-Crustacea: LC50 <i>Gammarus fasciatus (amphipod)</i> 0.51 mg/L [Acute] LC50 <i>Mysid shrimp</i> 0.49 mg/L [Acute] NOEC <i>Daphnia magna</i> 0.03 mg/L [Chronic]

Persistence and degradability

- Permethrin: not rapidly biodegradable.

Bioaccumulative potential

- Permethrin: Bioconcentration factor (BCF) 300; Does not bioaccumulate.

Mobility in Soil

- Permethrin: Immobile in soil.

Other adverse effects

Potential Environmental Effects

- This product is extremely toxic to fish and aquatic invertebrates and extremely toxic to bees exposed to direct treatment or to residues on crop or weeds.

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 empty into drains.

Packaging waste

- Dispose of content and/or container in accordance with local, regional, national, and/or international regulations. See product label for disposal instructions.

Section 14 - Transport Information

	UN number	UN proper shipping name	Transport hazard class(es)	Packing group	Environmental hazards
DOT	Not Applicable	Not Regulated	Not Applicable	Not Applicable	Not Applicable
IMO/IMDG	UN3082	Packaging > 5L: Environmentally Hazardous Substance, Liquid, n.o.s. (Permethrin)	9	III	Marine Pollutant
IATA/ICAO	UN3082	Packaging > 5L: Environmentally Hazardous Substance, Liquid, n.o.s. (Permethrin)	9	III	Acute Aquatic Toxicity

Special precautions for user • None known.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code • Not relevant.

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 material 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.

Precautionary Statements • KEEP OUT OF REACH OF CHILDREN.

Environmental Hazards

This product is extremely toxic to aquatic organisms, including fish and aquatic invertebrates. To protect the environment, do not allow pesticide to enter or runoff 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. This pesticide is extremely 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 foraging the treatment area.

Inventory		
Component	CAS	TSCA
Permethrin	52645-53-1	No
Prallethrin	23031-36-9	No
Piperonyl butoxide	51-03-6	Yes

United States

Environment

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

• Permethrin	52645-53-1	1.0 % de minimis concentration
• Prallethrin	23031-36-9	Not Listed
• Piperonyl butoxide	51-03-6	1.0 % de minimis concentration

Section 16 - Other Information

Revision Date	• 25/October/2017
Last Revision Date	• 23/August/2016
Preparation Date	• 23/August/2016
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.
Revision Statement	• Updated Section 1