

**PERTINENT ECO-SOLUTIONS, INC.  
SAFETY DATA SHEET**

This Safety Data Sheet has been prepared to comply with the US OSHA Hazcom 2024 Standard.

**SECTION 1: IDENTIFICATION**

**Product Identifier:**

**Trade Name:** Vetforce Equine Spray  
**SDS Date of Preparation:** January 27, 2025

**Recommended use of the chemical and restrictions on use:**

**Recommended use:** None known  
**Restrictions on use:** None known

**Details of the Supplier of the Safety Data Sheet:**

**Manufacturer:** Pertinent Eco-Solutions, Inc.  
 2800 Sumner Boulevard, Suite 136  
 Raleigh, NC 27616  
**Information Phone Number:** (919) 676-8644

**Emergency Telephone Number:**

**Emergency Spill Information:** INFOTRAC: 1-800-535-5053 (North America)  
 1-352-323-3500 (International)

**SECTION 2: HAZARDS IDENTIFICATION**

**GHS Classification:**

Physical	Health
Flammable Liquid Category 3	Eye Damage Category 1 Skin Sensitizer Category 1

**Label Elements:**

Danger!



**Hazard Phrases**

Flammable liquid and vapor.  
 May cause an allergic skin reaction.  
 Causes serious eye damage.

**Precautionary Phrases**

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
 Keep container tightly closed.  
 Ground and bond container and receiving equipment.  
 Use explosion-proof, electrical, ventilating, and lighting equipment.  
 Use non-sparking tools.  
 Take action to prevent static discharges.  
 Avoid breathing mist, vapors, or spray.  
 Contaminated work clothing must not be allowed out of the workplace.  
 Wear protective gloves and eye protection.  
 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
 Immediately call a POISON CENTER or doctor.  
 If on skin: Wash with plenty of water.  
 If skin irritation or rash occurs: Get medical attention.



Take off contaminated clothing and wash it before reuse.  
In case of fire: Use water fog or spray, alcohol-resistant foam, carbon dioxide or dry chemical to extinguish.  
Store in a well-ventilated place. Keep cool.  
Dispose of contents and container in accordance with local and national regulations.

**Other Hazards:** None known.

**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

Chemical Name	CAS#	%
Isopropanol	67-63-0	5-10
Sodium Lauryl Sulfate	151-21-3	3-7
Geraniol	106-24-1	1-<3
Cornmint Oil	68917-18-0	0.5-1.5
Lemongrass Oil	8007-02-1	0.5-1.5

The specific identity and/or exact percentage of composition have been withheld as a trade secret.

**SECTION 4: FIRST-AID MEASURES**

**Description of First Aid Measures:**

**Eye:** Immediately flush eyes thoroughly with large quantities of water for 20 minutes, while holding the eye lids open to be sure the material is washed out. Remove contact lenses if present and easy to do. Get immediate medical attention.  
**Skin:** Remove contaminated clothing. Wash the contact area thoroughly with soap and water for several minutes. Get medical attention if irritation or rash occurs. Launder clothing before re-use.  
**Inhalation:** Remove the victim to fresh air. If breathing is difficult or irritation persists, get medical attention.  
**Ingestion:** Do not induce vomiting unless directed to do so by medical personnel. Keep the victim calm and warm. Get medical attention if symptoms develop.

**Most Important symptoms and effects, both acute and delayed:** May cause moderate to severe eye irritation with possible eye damage. May cause skin sensitization. Inhalation of mists or vapors may cause respiratory tract irritation.

**Indication of any immediate medical attention and special treatment needed:** Immediate medical attention is required for eye contact.

**SECTION 5: FIRE-FIGHTING MEASURES**

**Suitable (and Unsuitable) Extinguishing Media:** Use water fog or spray, alcohol-resistant foam, carbon dioxide or dry chemical.

**Special Hazards Arising from the Chemical:** Flammable liquid and vapor. Vapors are heavier than air and may travel along surfaces to remote ignition sources and flash back. Vapors may form explosive mixtures with air in confined areas. During a fire, this product may release carbon oxides and other toxic or irritating compounds.

**Special Equipment and Precautions for Fire-Fighters:** Wear an approved, positive pressure, self-contained breathing apparatus, and full protective clothing. Cool fire exposed containers with water.

**SECTION 6: ACCIDENTAL RELEASE MEASURES**

**Personal Precautions, Protective Equipment and Emergency Procedures:**

Remove all ignition sources such as open flames and spark producing equipment. Avoid contact with eyes, skin, or clothing. Wear appropriate protective clothing to prevent eye and skin contact including impervious gloves, safety goggles and a respirator if needed. Avoid breathing mists or vapors. Ventilate area.

**Methods and Material for Containment and Cleaning Up:**

Cover with an inert absorbent material and collect into an appropriate container for disposal. Avoid releases to the environment. Report spills and releases as required to appropriate authorities.

**SECTION 7: HANDLING AND STORAGE**

**Precautions for Safe Handling:** Avoid breathing vapors and mists. Use with adequate ventilation. Avoid contact with the eyes, skin, and clothing. Always wear impervious gloves, chemical safety goggles and protective clothing when handling this material. Wash hands thoroughly after handling. Do not eat, drink, or smoke in the work area. Keep product away from heat, sparks, flames, and all other sources of ignition. No smoking in storage or use areas. Keep containers closed when not in use.

**Conditions for Safe Storage, Including any Incompatibilities:** Store in a container in a cool, dry, well-ventilated location away from oxidizers and incompatible materials. Keep container tightly closed when not in use.

**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

Chemical Name	Exposure Limits
Isopropanol	200 ppm TWA, 400 ppm STEL ACGIH TLV 400 ppm TWA OSHA PEL
Sodium Lauryl Sulfate	None Established
Geraniol	None Established
Cornmint Oil	None Established
Lemongrass Oil	None Established

**Appropriate Engineering Controls:** Use adequate general or local exhaust ventilation to maintain exposure levels below the occupational exposure limits. Use explosion proof electrical equipment and wiring where required.

**Personal Protective Equipment:**

**Respiratory Protection:** In operations where the occupational exposure limits are exceeded, an approved respirator with dust/mist cartridges or supplied air respirator should be used. Respirator selection and use should be based on contaminant type, form, and concentration. Follow applicable regulations and good Industrial Hygiene practice.

**Skin Protection:** Impervious gloves are recommended to prevent skin contact. Contact your glove supplier for selection assistance.

**Eye Protection:** Chemical safety goggles should be worn to prevent eye contact.

**Other Protective Equipment:** Impervious clothing is required to prevent skin contact and contamination of personal clothing. An eye wash facility and safety shower should be available in the work area.

**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

<b>Physical state:</b> Liquid	<b>Vapor Pressure:</b> No data available
<b>Color:</b> Colorless	<b>Relative Vapor Density (air = 1):</b> No data available
<b>Odor:</b> Characteristic odor	<b>Density/Relative Density:</b> No data available
<b>pH:</b> No data available	<b>Solubility:</b> Soluble in water
<b>Melting Point/Freezing Point:</b> 0°C (32°F) (approximate)	<b>Partition Coefficient (n-octanol/water):</b> No data available
<b>Boiling Point/Range:</b> No data available	<b>Auto-ignition Temperature:</b> No data available
<b>Flash Point:</b> 43°C (109.4°F) (Closed Cup)	<b>Decomposition Temperature:</b> No data available
<b>Flammability:</b> Not applicable	<b>Kinematic Viscosity:</b> No data available
<b>Flammable Limits:</b> LEL: 2 vol % (Isopropyl alcohol) UEL: 13 vol % (Isopropyl alcohol)	<b>Particle Characteristics:</b> No data available

**SECTION 10: STABILITY AND REACTIVITY**

**Reactivity:** Not reactive

**Chemical Stability:** Stable under normal storage and handling conditions.

**Possibility of Hazardous Reactions:** Hazardous polymerization will not occur.

**Conditions to Avoid:** Keep away from heat, sparks, flames, and other sources of ignition.

**Incompatible Materials:** Strong oxidizing agents, strong acids, and strong bases.

**Hazardous Decomposition Products:** Thermal decomposition will produce carbon oxides and other toxic or irritating compounds.

**SECTION 11: TOXICOLOGICAL INFORMATION**

**Potential Health Effects:**

**Eye:** May cause moderate to severe eye irritation with pain, tearing, and redness. May cause eye damage.

**Skin:** May cause mild skin irritation. May cause an allergic skin reaction (sensitization).

**Inhalation:** Inhalation of mists or vapors may cause nose and upper respiratory tract irritation.

**Ingestion:** Swallowing may cause gastrointestinal irritation, nausea, vomiting, and diarrhea.

**Chronic Hazards:** None known.

**Carcinogenicity:** None of the components in this product above 0.1% are listed as carcinogens by OSHA, IARC, and NTP.

**Acute Toxicity Values:**

Product ATE: >2000 mg/kg (oral)

Isopropanol: Oral rat LD50- 5840 mg/kg, Skin rabbit LD50- 16400 mg/kg, Inhalation rat LC50- 72.6 mg/L/4hr

Sodium Lauryl Sulfate: Oral rat LD50-1200 mg/kg, Skin rabbit LD50->2000 mg/kg

Geraniol: Oral rat LD50- 3600 mg/kg, Skin rabbit LD50- >5000 mg/kg

Cornmint Oil: Oral rat LD50-1240 mg/kg

Lemongrass Oil: Oral rat LD50->5000 mg/kg, Skin rabbit LD50- >5000 mg/kg

**SECTION 12: ECOLOGICAL INFORMATION**

**Ecotoxicity:**

Isopropanol: 96 hr LC50 Fathead minnow (flow through)-9640 mg/L, 48 hr EC50 Daphnia magna- 13299 mg/L

Sodium Lauryl Sulfate: 96 hr LC50 Pimephales promelas- 29 mg/L, 48 hr EC50 Ceriodaphnia dubia- 5.55 mg/L, 42 days NOEC

Pimephales promelas-  $\geq 1.357$  mg/L

Geraniol: 96 hr LC50 Danio rerio- 22 mg/L, 48 hr EC50 Daphnia magna- 10.8 mg/L, 72 hr EC50 Desmodemus subspicatus- 13.1 mg/L

Cornmint Oil: 96 hr LC50 Fish- 3.01 mg/L(QSAR), 48 hr EC50 Daphnia magna- 2.43 mg/L

This product is expected to be harmful to the aquatic environment. Releases to the environment should be avoided.

**Persistence and Degradability:** Isopropyl alcohol, Geraniol, and Cornmint Oil are readily biodegradable.

**Bioaccumulative Potential:** No data available

**Mobility in Soil:** No data available

**Other Adverse Effects:** None known

**SECTION 13: DISPOSAL CONSIDERATIONS**

Dispose in accordance with all local, state, and federal regulations.

**SECTION 14: TRANSPORTATION INFORMATION**

	UN Number	UN Proper Shipping Name	Hazard Class(s)	Packing Group	Environmental Hazards
US DOT	None	Not regulated per alcohol exception 49CFR173.150(e)	None	None	Not applicable
IMDG	UN1987	Alcohols, n.o.s. (Isopropanol)	3	III	Not applicable
IATA/ICAO	UN1987	Alcohols, n.o.s. (Isopropanol)	3	III	Not applicable

**Transport in Bulk according to IMO instruments:** Not applicable

**Special Precautions for User:** Not applicable

**SECTION 15: REGULATORY INFORMATION****U.S. FEDERAL REGULATIONS:**

**CERCLA 103 Reportable Quantity:** This product is not subject to reporting under CERCLA. Some states have more stringent reporting requirements. Report all spills in accordance with local, state, and federal regulations.

**SARA TITLE III:**

**Hazard Category for Section 311/312:** See OSHA Hazard Classification in Section 2.

**Section 313 Toxic Chemicals:** This product contains the following chemicals subject to SARA Title III Section 313 Reporting requirements: None

**Section 302 Extremely Hazardous Substances (TPQ):** None

**EPA Toxic Substances Control Act (TSCA) Status:** All the ingredients in this product are listed on the TSCA inventory or exempt.

**SECTION 16: OTHER INFORMATION**

**Date of Current Revision:** January 27, 2025

**Revision Summary:** Updated Section 2, 5, 6, 9, and 14.

**Date of Previous Revision:** December 23, 2024

This product is a 25(b) minimum risk pesticide that is sold as a consumer product. Consumer products are not subject to OSHA labeling so the actual product label will not contain the OSHA label elements shown below on this SDS.

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This above information is believed to be correct but does not propose to be all inclusive and shall be used only as a guide. Pertinent Eco-Solutions, Inc. shall not be held liable for any damage resulting from handling or from contact with the above product.