

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

This Safety Data Sheet has been prepared to comply with the US OSHA Hazcom 2012 Standard.

SECTION 1: IDENTIFICATION

Product Identifier:

Trade Name: Pertinent Ag Crawling Insect Concentrate
SDS Date of Preparation: February 22, 2023

Recommended use of the chemical and restrictions on use:

Recommended use: Control of pests in animal production houses
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 Corrosion Category 1B Skin Sensitization Category 1 Specific Target Organ Toxicity Single Exposure Category 3 (Narcotic effects)

Label Elements:

Danger!



Hazard Phrases

Flammable liquid and vapor.
 Causes severe skin burns and eye damage.
 May cause an allergic skin reaction.
 May cause drowsiness or dizziness.

Precautionary Phrases

Keep away from heat, sparks, open flames, and hot surfaces.-No smoking.
 Keep container tightly closed.
 Ground or bond container and receiving equipment.
 Use explosion-proof electrical, ventilating, or lighting equipment.
 Use only non-sparking tools.
 Take precautionary measures against static discharge.
 Do not breathe mist, vapors, or spray.
 Wash thoroughly after handling.
 Contaminated work clothing must not be allowed out of the workplace.
 Wear protective gloves, protective clothing, eye protection, and face 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 (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. Immediately call a POISON CENTER or doctor.
 Wash contaminated clothing before reuse.
 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor.
 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor.
 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.
 Store locked up.
 Dispose of contents and container in accordance with local and national regulations.

Other Hazards: None known.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS
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Chemical Name	CAS#	%
Isopropanol	67-63-0	20-30
Diatomaceous earth	61790-53-2	5-15
Thyme Oil	8007-46-3	5-15
Geraniol	106-24-1	5-15

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: Immediately flush skin with plenty of water for 15 minutes while removing contaminated clothing and shoes. Get immediate medical attention. Launder clothing before re-use. (Discard contaminated shoes).
Inhalation: Immediately remove victim to fresh air. If breathing is difficult, oxygen should be administered by qualified personnel. If breathing has stopped, administer artificial respiration. Get immediate medical attention.
Ingestion: Do NOT induce vomiting. Rinse mouth with water. Never give anything by mouth to an unconscious or convulsing person. Keep the victim calm and warm. Get immediate medical attention.

Most Important symptoms and effects, both acute and delayed: May cause severe eye, skin, respiratory tract irritation and burns. May cause skin sensitization. Inhalation of mists or vapors may cause central nervous system depression. Swallowing may cause burns to the mouth, throat, and intestinal tract. Prolonged overexposure may cause damage to eyes, skin, lungs, and teeth.

Indication of any immediate medical attention and special treatment needed: Immediate medical attention is required for all routes of exposures.

SECTION 5: FIRE-FIGHTING MEASURES
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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.

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. Prevent contact with eyes, skin, or clothing. Wear appropriate protective clothing to prevent eye and skin contact including impervious gloves, safety goggles and respirator if needed. Do not breathe 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. Report spills and releases as required to appropriate authorities.

SECTION 7: HANDLING AND STORAGE

Precautions for Safe Handling: Do not breathe mists or vapors. Use with adequate ventilation. Prevent contact with the eyes, skin, and clothing. Always wear impervious gloves, chemical safety goggles and protective clothing when handling this material. Wash 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
Diatomaceous earth (as silica, amorphous diatomaceous earth, uncalcined)	20 mppcf OSHA PEL
Thyme Oil	None Established
Geraniol	None Established

Appropriate Engineering Controls: Use with 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 and face shield 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

Appearance: Brown liquid	Vapor Pressure: Not available
Odor: Characteristic odor	Vapor Density (air = 1): Not available
Odor Threshold: Not established	Relative Density: No data available
pH: No data available	Solubility(ies): No data available
Melting Point/Freezing Point: -88°C (-126.4°F) (Isopropyl alcohol)	Partition coefficient: n-octanol/water: No data available
Boiling Point/Range: 82°C (179.6°F) (Isopropyl alcohol)	Auto-ignition Temperature: 399°C (750.2°F) (Isopropyl alcohol)
Flash Point: 31.8°C (89.24°F) (CC)	Decomposition Temperature: Not available
Evaporation Rate: Not available	Viscosity: Not available
Flammability (solid, gas): Not applicable	Flammable Limits: LEL: 2 vol % (Isopropyl alcohol) UEL: 13 vol % (Isopropyl alcohol)

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, strong bases, and hydrofluoric acid.

Hazardous Decomposition Products: Thermal decomposition will produce oxides of carbon.

SECTION 11: TOXICOLOGICAL INFORMATION

Potential Health Effects:

Eye: May cause severe eye irritation and burns with pain, tearing, and redness. May cause permanent eye damage, vision impairment, and blurred vision.

Skin: May cause severe skin irritation and burns with redness, ulceration, pain, dermatitis, and scarring. May cause an allergic skin reaction (sensitization).

Inhalation: Inhalation of mists or vapors may cause severe irritation and burns of the nose, throat, and upper respiratory tract. Inhalation of mists or vapors may also cause central nervous system depression. Symptoms of central nervous system depression include headache, dizziness, drowsiness, nausea, and unconsciousness.

Ingestion: Swallowing may cause severe digestive tract irritation or burns to the mucous membranes, esophagus and stomach with shock and possible perforation and peritonitis.

Chronic Hazards: None known.

Carcinogenicity: None of the components of this product are listed as carcinogens by OSHA, IARC, and NTP.

Acute Toxicity Values:

Product ATE: >2000 mg/kg (oral)

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

Diatomaceous earth: Not toxic

Thyme Oil: Oral rat LD50- 2840 mg/kg, Skin rabbit LD50- >5000 mg/kg

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

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity:

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

Thyme Oil: 96 hr LC50 Fathead minnow- 3.2 mg/L, 48 hr LC50 Daphnia magna- 3.2 mg/L, 72 hr NOEC Algae- 1.9 mg/L, 21 days NEOC Daphnia magna- 2.0 mg/L

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

Persistence and Degradability: Isopropyl alcohol, Geraniol, and Thyme 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	UN2924	Flammable liquid, corrosive n.o.s. (isopropanol, thyme oil)	3(8)	III	No
IMDG	UN2924	Flammable liquid, corrosive n.o.s. (isopropanol, thyme oil)	3(8)	III	No
IATA/ICAO	UN2924	Flammable liquid, corrosive n.o.s. (isopropanol, thyme oil)	3(8)	III	No

Transport in Bulk According to Annex III MARPOL 73/78 and the IBC Code: 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 of the ingredients of this product are listed on the TSCA inventory or exempt.

SECTION 16: OTHER INFORMATION

Date of Current Revision: August 26, 2021

Revision Summary: New SDS

Date of Previous Revision: N/A

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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.