



**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 Fly Solution IGR 0.4% Formulating Concentrate
SDS Date of Preparation: April 22, 2022; Revised April 16, 2023

Recommended use of the chemical and restrictions on use:

Recommended use: For use in cattle feeds to prevent the breeding of horn flies in the manure of treated cattle. Read and understand the entire label before using. Use only according to label directions. It is a violation of Federal law to use this product in a manner inconsistent with its labeling. EPA # 97680-4

Restrictions on use: Reference product label

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

SECTION 2: HAZARDS IDENTIFICATION

GHS Classification:

Physical	Health
Combustible Dust	Not Classified

Label Elements:

Warning!

Hazard Phrases

May form combustible dust concentrations in air.

Other Hazards: None known.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS#	%
S-Methoprene	65733-16-6	0.4

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: Rinse thoroughly with water. Get medical attention if irritation occurs and persists.

Skin: Remove contaminated clothing. Wash contact area with soap and water. Get medical attention if irritation or symptoms of exposure develop. Launder clothing before re-use.

Inhalation: Remove 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: Contact with dust may cause mechanical eye irritation and skin irritation. Inhalation of dust may cause irritation of the nose, throat, and upper respiratory irritation.

Indication of any immediate medical attention and special treatment needed: Immediate medical attention should not be required.

SECTION 5: FIRE-FIGHTING MEASURES

Suitable (and Unsuitable) Extinguishing Media: Use water fog or spray, alcohol-foam, universal foam, carbon dioxide or dry chemical. Do not use solid water jet as that may create a dust cloud that can present an explosion hazard.

Special Hazards Arising from the Chemical: Dust generated in handling this material may present a potential fire and explosion hazard if suspended in air at high concentrations. Settled dust presents a fire hazard. Resuspension of the dust into the air by vibration, traffic, material handling, etc. in high concentrations in the presence of an ignition source could result in a dust explosion. Minimize the generation and accumulation of dust. During a fire, this product may release oxides of carbon 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. Contain water used in firefighting from entering sewers or natural waterways.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures:
Remove all ignition sources such as open flames, spark producing equipment, pilot lights, etc. Avoid contact with eyes or clothing. Wear appropriate protective clothing and respirator if needed. Avoid generating air-born dust. Avoid breathing dust. Powders that become wet may cause surfaces to be extremely slippery and present a slip hazard.

Methods and Material for Containment and Cleaning Up:
Scoop or shovel up using methods that minimize the generation of airborne dust. Non-sparking tools should be used. Dust deposits should not be allowed to accumulate on surfaces, as these may form an explosive mixture if they are released into the atmosphere in sufficient concentrations. Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air). Place dry material into an appropriate container for disposal. Wipe spill area with a damp cloth. Avoid releases to the environment. Report spills and releases as required to appropriate authorities.

SECTION 7: HANDLING AND STORAGE

Precautions for Safe Handling: Avoid generating or breathing dust. Avoid contact with eyes or clothing. Use with adequate ventilation. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove and wash contaminated clothing before reuse. Possible combustible dust hazard. Minimize the generation and accumulation of dust. Keep dust away from heat, sparks, flames, and all other sources of ignition. Follow good housekeeping practices to keep surfaces, including areas overhead such as piping, drop ceilings, ductwork, etc. free from settled dust. Dry powders can build static electricity charges when subjected to friction of transfer and in mixing operations. Provide adequate precautions, such as electrical grounding and bonding, or inert atmospheres. Keep containers closed when not in use.

Conditions for Safe Storage, Including any Incompatibilities: Store in a dry area. Do not contaminated with pesticides or fertilizer. Do not contaminated water, food, or feed by storage or disposal. Store container away from sources of ignitions and incompatible materials. Keep container tightly closed when not in use.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Chemical Name	Exposure Limits
Soybean Flour (as PNOC)	5 mg/m ³ (respirable fraction), 15 mg/m ³ (total dust) TWA OSHA PEL
Soybean Oil (as vegetable oil mist)	5 mg/m ³ (respirable fraction), 15 mg/m ³ (total dust) TWA OSHA PEL
Amorphous silica	20 mppcf OSHA PEL

S-Methoprene	None Established
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Appropriate Engineering Controls: Use with adequate general or local exhaust ventilation to maintain exposure levels below the occupational exposure limits. It is recommended that all dust control equipment such as local exhaust ventilation and material transport systems involved in handling this product contain explosion relief vents or an explosion suppression system or an oxygen deficient environment. Ensure that dust handling systems (such as exhaust ducts, dust collectors, vessels and processing equipment) are designed in a manner to prevent the escape of dust into the work area (i.e. there is no leakage from the equipment). Use only appropriately classified electrical equipment and powered industrial trucks.

Personal Protective Equipment:

Respiratory Protection: In operations where exposure levels are excessive, 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 prolonged skin contact. Contact your glove supplier for selection assistance.

Eye Protection: Chemical safety goggles or dust goggles are recommended 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
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Appearance: White dust	Vapor Pressure: Not applicable
Odor: Typical, slight odor	Vapor Density (air = 1): Not applicable
Odor Threshold: Not established	Relative Density: 0.74 g/cm ³
pH: Not applicable	Solubility(ies): Insoluble in water.
Melting Point/Freezing Point: Not available	Partition coefficient: n-octanol/water: Not applicable
Boiling Point/Range: Not applicable	Auto-ignition Temperature: Not applicable
Flash Point: Not applicable	Decomposition Temperature: Not available
Evaporation Rate: Not applicable	Viscosity: Not applicable
Flammability (solid, gas): Combustible dust	Flammable Limits: LEL: Not applicable UEL: Not applicable

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. Avoid hygroscopic conditions and dust formation.

Incompatible Materials: Strong oxidizing agents and acids.

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

SECTION 11: TOXICOLOGICAL INFORMATION
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Potential Health Effects:

Eye: Dust may cause mechanical (abrasive) irritation.

Skin: Contact with dust may cause skin irritation.

Inhalation: Dust may cause irritation to nose, throat, and upper respiratory tract.

Ingestion: Swallowing may cause mouth, throat, and gastrointestinal irritation with nausea and vomiting.

Chronic Hazards: None known.



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

Acute Toxicity Values:

Soybean Flour: Not toxic

Soybean Oil: Not toxic

Amorphous silica: Oral rat LD50- >5000 mg/kg, Skin rabbit LD50- >2000 mg/kg

S-Methoprene: Oral rat LD50- >5050 mg/kg, Skin rat LD50- >5050 mg/kg, Inhalation rat LC50- >2.38 mg/L

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity:

S-Methoprene: 96 hr LC50 Zebrafish- 4.26 mg/L, 48 hr EC50 Daphnia magna- 0.22 mg/L, 72 hr ErC50 Selenastrum capricornutum- 2.264 mg/L, 21 day NOEC Daphnia magna- 0.019 mg/L

This product is expected to be harmful to the aquatic environment with long-term adverse effects. Releases to the environment should be avoided.

Persistence and Degradability: S-Methoprene is not readily biodegradable.

Bioaccumulative Potential: S-Methoprene: 516 BCF.

Mobility in Soil: No data available

Other Adverse Effects: None known

SECTION 13: DISPOSAL CONSIDERATIONS

Pesticide Disposal: Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

Container Disposal: Nonrefillable container. Do not use or refill this container. Completely empty bag by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into mixing equipment. Then offer for recycling, if available, or dispose of empty bag in a sanitary landfill or by incineration, or if allowed by state and local authorities, by burning. If burned, stay out of smoke.

SECTION 14: TRANSPORTATION INFORMATION

	UN Number	UN Proper Shipping Name	Hazard Class(s)	Packing Group	Environmental Hazards
US DOT	None	Not regulated	None	None	Not applicable
IMDG	None	Not regulated	None	None	Not applicable
IATA/ICAO	None	Not regulated	None	None	Not applicable

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

This chemical is a pesticide product registered by the United States Environmental Protection Agency [EPA Registration # 97680-4] 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 Labeling:
Keep Out Of Reach of Children**



CAUTION
PRECAUTIONARY STATEMENTS
Hazards to Humans and Domestic Animals

CAUTION: Causes moderate eye irritation. Harmful if absorbed through skin. Avoid contact with eyes, skin, or clothing. Wash thoroughly with soap and water after handling.

Environmental Hazards: Do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean highwater mark. Do not contaminate water when cleaning equipment or disposing of equipment wash waters.

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: This product is an EPA Registered product #97680-9.

SECTION 16: OTHER INFORMATION

Refer to NFPA 654, *Standard for the Prevention of Fire and Dust Explosions from the Manufacturing, Processing, and Handling of Combustible Particulate Solids*, for safe handling.

Date of Current Revision: March 9, 2022

Revision Summary: New SDS

Date of Previous Revision: N/A

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.