

Material Safety Data Sheet

Product Name: ECOWORKS EC® - BOTANICAL INSECTICIDE, MITICIDE, NEMATOCIDE & FUNGICIDE

1. Chemical, Product and Company Identification

ECOWORKS EC® Botanical Insecticide, Miticide, Nematicide and Fungicide- End use formulation

<u>EPA Signal Word</u>	<u>Chemical Name</u>	<u>Chemical Class</u>	<u>EPA Registration Number</u>
CAUTION	NEEM OIL	NEEM BIOLOGICAL	89152-4

Formulator:

ECOSTADT TECHNOLOGIES LLC
1024 Iron Point Road, Suite 100-1318
Folsom, CA 95630
Phone: (916) 357-6607
Fax : (916) 357-6501

Emergency Telephone Numbers:

National Pesticide Information Center (NPIC)

1-800-858-7358 – 6.30 am to 4.30 pm Pacific Time
1-800-222-1222 – During Other Times

CHEMTREC®

1-800-424-9300 / 1-703-527-3887

2. Ingredients

<u>Chemical Component</u>	<u>Percent Range</u>	<u>CAS Numbers</u>	<u>OSHA-PEL</u>	<u>ACGIH-TLV</u>	<u>NTP/IARC/OSHA CARCINOGEN</u>	<u>OTHER</u>
NEEM OIL (COLD PRESSED)	70%	8002-65-1	N/A	N/A	N/A	N/A
Other Ingredients	30%		N/A	N/A	N/A	N/A

3. Hazards Identification

Emergency Overview:

Physical Properties

Appearance: Brownish Green Liquid

Odor: Garlic odor

Hazardous Decomposition Products: Unknown

Unusual Fire, Explosion, and Reactivity Hazards: Unknown

Aquatic Toxicity: Toxic to fish

Potential Health Effects

Acute Effects: Non- irritant to skin & eye, Non-sensitizer

Symptoms of Acute Exposure: None

Chronic Effects: Unknown

Carcinogenicity: None of the components in this material is listed by IARC, NTP, OSHA, (or) ACGIH as a carcinogen.

US-GHS Classification: Based on Acute Oral, Acute Dermal, Dermal & Eye Irritation studies, the product is not classifiable.

4. First Aid Measures

Primary Routes of Exposure:

Inhalation, Ingestion, Skin, and Eyes

Sign and Symptoms of Exposure:

Inhalation: May be irritating to mucous membranes and excessive exposure may result in drowsiness.

Ingestion: May cause drowsiness.

Skin Contact: No irritation.

Eye Contact: No irritation.

Emergency First Aid Procedure:

If Inhaled: Move person to fresh air. If person is not breathing, call 911 or an ambulance, and then give artificial respiration, preferably mouth-to-mouth if possible. Get medical attention.

If Ingested: Induce vomiting by gastric lavage. Call a physician.

If on Skin: Take off contaminated clothing. Wash skin with plenty of soap and water. Call a physician for medical advice.

If in Eyes: Hold eye open and rinse slowly & gently with water for 15 to 20 minutes. Remove contact lenses, if present, after first 5 minutes and then continue rinsing eyes with excessive water. Call a physician for medical advice.

5. Fire Fighting Measures and Explosion Hazard Data

Flash Point: >216.5 °F (102.5 °C)

Upper & Lower Flammable Limits: Unknown

Auto ignition Temperature: Not established

Fire Extinguishing Media: CO₂, Dry Chemical, Foam

Special Fire Fighting Procedures: Evacuate personnel to a safe area. Wear positive-pressure breathing apparatus and full protective clothing. Fight fire from maximum distance. Stay up-wind and out of low areas.

6. Accidental Release Measures

Steps to be Taken if Material is Released or Spilled

General: Consult an expert on the disposal of recovered material. Ensure disposal is in compliance with government requirements and ensure conformity of local disposal regulations. Notify the appropriate authorities immediately. Take all additional action necessary to prevent and remedy the adverse effects of the spill.

Specific: Evacuate personnel, thoroughly ventilate area, and use self contained breathing apparatus and protective clothing. Dike spill. Absorb spilled material with Dri-Rite, sawdust, sand, or other adsorbent material, taking care not to generate dust. Collect clean-up material into drums, cover, and label for disposal according to local regulations. Scrub contaminated area with detergent and water. Prevent liquid from entering sewers, waterways, or low areas. Product is not regulated under RCRA or CERCLA.

7. Handling and Storage

Precautions in Handling: Do not contaminate water, food, or feed by storage or disposal. Wash hands before eating, drinking, chewing gum, using tobacco products, or using the toilet. Remove clothing immediately if pesticide gets inside and then wash thoroughly and put on clean clothes.

Storage: Store in cool, dry place. Keep in tightly closed and original containers. Do not store this product above 105 °F or below 32°F for extend periods of time. Best to keep in cool dry place and to avoid direct sunlight. Do not re-fill or re-use containers. Dispose of containers in an approved waste facility.

8. Exposure Controls/Personal Protection

Ventilation Requirements:

Thorough ventilation is recommended in case of accidental spillage.

Personal Protective Equipment:

Nonirritant to skin and eyes. Avoid breathing vapor. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Avoid contact with skin, eyes, or clothing. Wash thoroughly with soap and water after handling. Wash contaminated clothing before reuse.

Manufacturing and Packaging Employees:

Eye/Face: Wear chemical safety goggles

Skin Protection: Wear protective gloves

Respiratory Protection: Thorough ventilation is recommended in case of accidental spillage

Additional Information: Wash hands before eating, drinking, chewing gum, using tobacco products, or using the toilet. Remove clothing immediately if pesticide gets inside and then wash thoroughly and put on clean clothing.

Applicators and Handlers: Must wear long-sleeved shirt and long pants, waterproof gloves, and shoes plus socks.

9. Physical and Chemical Properties

Appearance:	Brownish green liquid
Specific Gravity:	0.897 g/cm ³ @ 20 °C
Dispersion in Water:	Forms emulsion
pH:	6.9 @ 25 °C
Odor:	Garlic odor
Viscosity:	19.31 cps at 20 °C
Boiling point:	Unknown
Flash point:	115 °C (Not Flammable)
Vapor pressure:	0.1862 kPa

10. Stability and Reactivity

Stability: Stable at ordinary conditions of use and storage.

Incompatibility: Incompatible with acid, alkaline, and oxidizing substances

Decomposition/ By Products: Unknown

Hazardous Polymerization: Unknown.

11. Toxicological Information

Acute Toxicity Studies:

Acute Oral Toxicity:	Rat LD ₅₀ > 5,000 mg/kg
Acute Dermal Toxicity:	Rat LD ₅₀ > 5,000 mg/kg
Acute Dermal Irritation	Rabbit -Non-Irritant
Acute Eye Irritation:	Rabbit – Non-Irritant
Skin Sensitization:	Guinea Pig – Non-sensitizer
Acute Inhalation:	Rats >2.90mg/L

12. Ecological Information

Acute Fish Toxicity (Rainbow Trout): Mildly Toxic

Acute Daphnia Immobilization: Mildly Toxic

Effect on Birds: Non-Toxic

13. Disposal Considerations

Do not contaminate water, food, or feed by storage or disposal. Dispose of containers in an approved disposal facility – refer to product labeling. Open dumping is prohibited. Do not re-fill (or) re-use containers. Ensure compliance with Local, State, and Federal regulations. Do not flush to surface water or sanitary sewer systems.

14. Transportation Information

IMCO Class /DOT Classification: Not regulated

IMDG/IMO: Not regulated

IATA: Not regulated

TDG: Not regulated

Special Instructions: No special instruction on handling

Flammability: Non-flammable

UN Number: Not classified as Dangerous cargo and Not available

15. Regulatory Information

SARA Title III Classifications

Section 302/304: Not applicable

Section 311/312: Not applicable

Section 313 Chemical(s): Not applicable

Proposition 65

Does not contain any Proposition 65 chemicals.

CERCLA Reportable Quantity (RQ)

Not applicable

RCRA Classification

Under RCRA, it is the responsibility of the product user to determine at the time of disposal, whether a material containing the product or derived from the product should be classified as a hazardous waste.

TSCA Status

Not Applicable

US-GHS Classification

Based on Acute Oral, Acute Dermal, Dermal & Eye Irritation studies, the product is not classifiable.

16. Other Information

NFPA Hazard Ratings

Health: 0

Flammability: 0

Reactivity: 0

0	Least
1	Slight
2	Moderate
3	High
4	Severe

Prepared by: ECOSTADT TECHNOLOGIES L.L.C.

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