

# Material Safety Data Sheet

Product Name : ECOARMOR™ Botanical Insecticide, Miticide, and Nematicide

## 1. Chemical, Product and Company Identification

ECOARMOR™ Botanical Insecticide, Miticide, Nematicide acts as an insect anti-feedant, insect growth regulator (IGR), and insect repellent.

### EPA Signal Word

CAUTION

### Chemical Name

AZADIRACTIN

### Chemical Class

BIOCHEMICAL PESTICIDE

### EPA Registration Number

89152-2

### Formulator :

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

### 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> |
|---------------------------|----------------------|--------------------------|-----------------|------------------|---------------------------------|--------------|
| AZADIRACTIN               | 1.5%                 | 11141-17-6<br>95507-03-2 | N/A             | N/A              | N/A                             | N/A          |
| Other Ingredients         | 98.5%                |                          | N/A             | N/A              | N/A                             | N/A          |

## 3. Hazards Identification

### Emergency Overview :

### Physical Properties

**Appearance :** Brown Liquid

**Odor :** Ripe fruit odor at 20 °C

**Hazardous Decomposition Products :** None Known

**Unusual Fire, Explosion, and Reactivity Hazards :** None Known

**Aquatic Toxicity :** Toxic to fish

### Potential Health Effects

**Acute Effects :** Harmful if absorbed through the skin

**Symptoms of Acute Exposure :** None Known

**Chronic Effects :** None Known

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

## 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 :** May cause mild irritation.

**Eye Contact :** May cause mild 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 for medical advice.

**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:** >300 °F (100 °C) **Upper & Lower Flammable Limits :** NK

**Auto ignition Temperature :** Not established

**Fire Extinguishing Media :** CO<sub>2</sub>, 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.

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**8. Exposure Controls/Personal Protection**

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**Ventilation Requirements :**

Thorough ventilation is recommended in case of accidental spillage.

**Personal Protective Equipment :**

Harmful if absorbed through skin or inhaled. Avoid breathing vapor. Causes moderate eye irritation. 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 protect 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.

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**9. Physical and Chemical Properties**

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|                              |                                    |
|------------------------------|------------------------------------|
| <b>Appearance :</b>          | Brown liquid                       |
| <b>Specific Gravity :</b>    | 1.08 g/ ml (8.98 lb / gal) @ 22 °C |
| <b>Dispersion in Water :</b> | Dispersible                        |
| <b>pH :</b>                  | 4.5 @ 19 °C (1% w/w aqueous)       |
| <b>Odor :</b>                | Ripe fruit odor at 20 C            |
| <b>Viscosity :</b>           | Not Known                          |
| <b>Boiling point :</b>       | Not Known                          |
| <b>Freezing point :</b>      | -10 °C                             |
| <b>Vapor pressure :</b>      | 96 mm Hg @ 20 °C                   |

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**10. Stability and Reactivity**

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**Stability :** Stable at ordinary conditions of use and storage.

**Incompatibility :** Incompatible with acid, alkaline, and oxidizing substance

**Decomposition/ By Products :** Will produce oxides of Carbon, Nitrogen etc.

**Hazardous Polymerization :** Unknown.

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**11. Toxicological Information**

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**Acute Toxicity/Irritation Studies:**

|                                 |                                       |
|---------------------------------|---------------------------------------|
| <b>Acute Oral :</b>             | Rat LD <sub>50</sub> > 5,000 mg/kg    |
| <b>Acute Dermal :</b>           | Rabbit LD <sub>50</sub> > 2,000 mg/kg |
| <b>Acute Inhalation :</b>       | Rat LD <sub>50</sub> > 1.32 mg/ L     |
| <b>Primary Eye Irritation :</b> | Rabbit – No irritation                |
| <b>Skin Sensitization :</b>     | Guinea Pig – No sensitization         |

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**12. Ecological Information**

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**Acute Fish Toxicity (Rainbow Trout) :** Moderately Toxic

**Acute Daphnia Immobilization :** Slightly Toxic

**Effect on Birds :** Non Toxic

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**13. Disposal Considerations**

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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.

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**14. Transportation Information**

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**DOT Classification:** Not regulated

**International Maritime Organization:** Not regulated

**International Civil Aviation Organization:** Not regulated

**Special Instructions:** No special instruction on handling required

**Flammability:** Non flammable

**Transport by Air:** Safe for Air Transport

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**15. Regulatory Information**

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**SARA Title III Classifications**

**Section 302/304** N/A

**Section 311/312** N/A

**Section 313 Chemical(s)** N/A

**Proposition 65**

Not Applicable

**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

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**16. Other Information**

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**NFPA Hazard Ratings**

|                      |   |   |          |
|----------------------|---|---|----------|
| <b>Health:</b>       | 1 | 0 | Least    |
| <b>Flammability:</b> | 1 | 1 | Slight   |
| <b>Reactivity:</b>   | 0 | 2 | Moderate |
|                      |   | 3 | High     |
|                      |   | 4 | Severe   |

**Prepared by :** ECOSTADT TECHNOLOGIES L.L.C.

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