# Safety Data Sheet

## 1 IDENTIFICATION

**Product Identifier:**
- **Product Name:** TreeMec® Insecticide-Miticide
- **EPA Reg. No.:** 69117-12
- **Synonyms:** None

**Recommended Use:** Insecticide and Miticide

**Use Restrictions:** Do not inject food bearing plants.

**Supplier Information:** ArborSystems, Inc. d/b/a ArborSystems
PO Box 34645
Omaha, NE 68134 USA
Toll Free: 800.698.4641
Phone: 402.339.4459
Fax: 402.339.5011
Email: mike@arborsystems.com
Website: www.arborsystems.com

**Emergency Phone Number:** 1.800.222.1222 (Medical)

## 2 HAZARDS IDENTIFICATION

**Hazards Classification:** This mixture is considered hazardous by the 2012 OSHA Communication Standard (29 CFR 1910.1200).
- Acute toxicity-Oral and Dermal: Category 4
- Serious eye damage/eye irritation: Category 2A
- Reproductive toxicity: Category 1B

**GHS Label Elements, including Precautionary Statements:**

**Signal Word:** Danger

**Hazard Statements:** Harmful if swallowed. Harmful in contact with skin. Causes serious eye irritation. May damage fertility or the unborn child.

**Appearance:** Pale Yellow

**Physical state:** Liquid

**Odor:** Alcohol

**Precautionary Statements:**

**Prevention:** Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves/clothing; and eye/face protection. Thoroughly wash face, hands and any exposed skin after handling. Do not eat, drink or smoke when using this product.

**Response:** If exposed or concerned, get medical advice/attention.

**Eyes:** If in eyes, rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing if eye irritation persists. Get medical advice/attention.

**Skin:** If on skin, wash with plenty of soap and water. Call a poison control center or doctor/physician if you feel unwell. Take off contaminated clothing and wash it before reuse.

**Ingestion:** If swallowed, call a poison control center or doctor/physician if you feel unwell. Rinse mouth.

**Storage:** Store locked up.

**Disposal:** Dispose of contents/container to an approved waste disposal plant.

**Unknown Acute Toxicity:** 0% of the mixture is of unknown toxicity.
3 COMPOSITION / INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS Number</th>
<th>Percent</th>
<th>HMIRA* Registry No.</th>
<th>Date HMIRA filed and date exemption granted (if applicable)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tetrahydrofurfuryl alcohol</td>
<td>97-99-4</td>
<td>96</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>


4 FIRST-AID MEASURES

General Advice: Show this SDS to the doctor in attendance.

Inhalation: Remove to fresh air.

Eye Contact: Immediately rinse with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Keep eye wide open while rinsing. Do not rub affected area. Get medical attention if irritation develops and persists.

Skin Contact: Immediately wash off with plenty of water for at least 15 minutes. If symptoms persist, call a physician.

Ingestion: Do not induce vomiting. Clean mouth with water and drink plenty of water afterwards. Never give anything by mouth to an unconscious person. Call a physician.

Self-protection of the first aider: Ensure that medical personnel are aware of the material(s) involved. Take precautions to protect oneself and prevent spread of contamination. Wear personal protective clothing (see Section 8). Avoid contact with skin, eyes or clothing.

Most Important Symptoms and Effects: Burning sensation.

Note to Physician: Treat symptomatically.

5 FIRE-FIGHTING MEASURES

Suitable Extinguishing Media: Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media: CAUTION: Use of water spray when fighting fire may be inefficient.

Specific Hazards Arising from this Mixture: No information available.

Hazardous Combustion Products: Carbon oxides.

Sensitivity to Mechanical Impact: None.

Sensitivity to Static Discharge: None.

Special Protective Equipment for Firefighters: Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

6 ACCIDENTAL RELEASE MEASURES

Personal Precautions: Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Use personal protective equipment as required.

Other Information: Refer to protective measures listed in Sections 7 and 8.

Containment Methods: Prevent further leakage or spillage if safe to do so.

Cleanup Methods: Dam up. Soak up with inert absorbent material. Pick up and transfer to properly labeled containers.

7 HANDLING AND STORAGE

Precautions for Safe Handling: Handle in accordance with good industrial hygiene and safety practices. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Do not eat, drink or smoke when using this product. Remove contaminated clothing and shoes.

Storage Conditions: Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children. Store locked up.

8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Control Parameters - Exposure Limits

This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Appropriate Engineering Controls: Showers, eyewash stations and ventilation systems.

Individual Protection Measures – Personal Protective Equipment:

Eye/ Face: Wear safety glasses with side shields (or goggles). If splashes are likely to occur, wear safety glasses with side-shields.

Hand: Wear suitable gloves.

Skin/ Body: Wear suitable protective clothing. Long-sleeved clothing.

Respiratory: No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

General Hygiene Considerations: Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product. Wash hands before breaks and immediately after handling the product.
### PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auto-ignition temperature</td>
<td>N/D</td>
<td></td>
</tr>
<tr>
<td>Color</td>
<td>Pale yellow</td>
<td></td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>N/D</td>
<td></td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>N/D</td>
<td></td>
</tr>
<tr>
<td>Flammability (solid,gas)</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Flash point</td>
<td>200.66°F</td>
<td></td>
</tr>
<tr>
<td>Freezing point</td>
<td>N/D</td>
<td></td>
</tr>
<tr>
<td>Initial boiling point and range</td>
<td>N/D</td>
<td></td>
</tr>
<tr>
<td>Melting point</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Odor</td>
<td>Slight solvent</td>
<td></td>
</tr>
<tr>
<td>Partition coefficient</td>
<td>n-octanol/water: N/D</td>
<td></td>
</tr>
<tr>
<td>pH</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Physical state</td>
<td>Liquid</td>
<td></td>
</tr>
<tr>
<td>Relative density</td>
<td>8.83 lbs/gal (1.06 g/mL)</td>
<td></td>
</tr>
<tr>
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<td>Complete in water</td>
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### STABILITY AND REACTIVITY

Reactivity: No information available.

Chemical Stability: Stable under normal conditions.

Possibility of Hazardous Reactions: None under normal processing.

Hazardous Polymerization: Does not occur.

Conditions to Avoid: None known based on information supplied.

Incompatible Materials: None known based on information supplied.

Hazardous Decomposition Products: Carbon oxides.

### TOXICOLOGICAL INFORMATION

Information on Likely Routes of Exposure – Product Information:

**Inhalation**: Acute LC$_{50}$ = 5.04 mg/L (4h).

**Eye Contact**: Maximum average score = 28; opacity clearing by day 14 and irritation clearing by day 7.

**Skin Contact**: Dermal LD$_{50}$ = 5050 mg/kg. Irritation score = 0.3 (out of a possible 8.0); not a skin irritant. Not a dermal sensitizer.

**Ingestion**: Acute LD$_{50}$ = 1030 mg/kg.

Information on Toxicological Effects:

**Symptoms**: May cause redness and tearing of the eyes.

Numerical Measures of Toxicity – Acute Toxicity:

**ATEmix (oral)**: 810.00 mg/kg

**ATEmix (dermal)**: 2,000.00 mg/kg

**Unknown Acute Toxicity**: 0% of the mixture is of unknown toxicity.

Delayed and Immediate Effects as well as Chronic Effects from Short- and Long-term Exposure:

**Skin corrosion/irritation**: May cause skin irritation.

**Serious eye damage/eye irritation**: Irritating to eyes.

**Respiratory or Skin Sensitization**: No irritation; not a skin sensitizer.

**Germ cell mutagenicity**: No information available.

**Carcinogenicity**: No information available.

**Reproductive Toxicity**: Classification based on data available for ingredients: Contains a known or suspected reproductive toxin.

**STOT-Single Exposure**: No information available.

**STOT-Repeated Exposure**: No information available.

**Aspiration Hazard**: No information available.
12 ECOLOGICAL INFORMATION (NON-MANDATORY)

Exotoxicity

<table>
<thead>
<tr>
<th>Chemical Name / CAS Number</th>
<th>Toxicity to Algae</th>
<th>Toxicity to Fish</th>
<th>Toxicity to Microorganisms</th>
<th>Daphnia magna (water flea)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tetrahydrofurfuryl alcohol / 97-99-4</td>
<td>-</td>
<td>48h LCso=3400 mg/L (Chaetodonoides)</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Persistence and Degradability: No information available.
Bioaccumulation: There is no data for this product.
Mobility: No information available.
Other Adverse Effects: No information available.

13 DISPOSAL CONSIDERATIONS (NON-MANDATORY)

Waste Treatment Methods:
Waste from Residues/Unused Products: Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.
Contaminated Packaging: Do not reuse empty containers.

14 TRANSPORT INFORMATION (NON-MANDATORY)

DOT:
Proper Shipping Name: Consumer Commodity
Hazard Class: ORM-D
Description: Consumer Commodity, ORM-D

TGD, MEX, ICAO, IATA, IMDG/IMO, RID, ADR and ADN: Not regulated.

15 REGULATORY INFORMATION (NON-MANDATORY)

International Regulations:
Ozone Depleting Substances: Not Applicable
Persistent Organic Pollutants: Not Applicable
Export Notification Requirements: Not Applicable

International Inventories:
TSCA, DSL/NDSL, EINECS/ELINCS, ENCS, KECL, PICCS and AICS: Contact supplier for inventory compliance status.
TSCA: United States Toxic Substances Control Act Section 8(b) Inventory; DSL/NDSL: Canadian Domestic Substances List/Non-Domestic Substances List; EINECS/ELINCS: European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances; ENCS: Japan Existing and New Chemical Substances; KECL: Korean Existing and Evaluated Chemical Substances; PICCS: Philippines Inventory of Chemicals and Chemical Substances; and AICS: Australian Inventory of Chemical Substances.

U.S. Federal Regulations:
SARA 313: Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (“SARA”). This product does not contain any chemicals that are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.
SARA 313.312 Hazard Categories:
Acute Health Hazard: Yes
Chronic Health Hazard: Yes
Fire Hazard: No
Sudden Release of Pressure Hazard: No
Reactive Hazard: No

CWA (Clean Water Act): This product does not contain any substances regulated as pollutants pursuant to the CWA (40 CFR §§ 122.21 and 122.42).

CERCLA (Comprehensive Environmental Response Compensation and Liability Act): This material, as supplied, does not contain any substances regulated as hazardous substances under CERCLA (40 CFR Part 302) of the Superfund Amendments and Reauthorization Act (SARA) (40 CFR Part 355). There may be specific reporting requirements at the local, regional or state level pertaining to releases of this material.
FIFRA (Federal Insecticide, Fungicide and Rodenticide Act, as Amended): This chemical is a pesticide product registered by the United States Environmental Protection Agency 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 (“SDSs”) 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.

Precautionary Statements

Hazards to Humans & Domestic Animals

WARNING: Causes substantial but temporary eye injury. Harmful if swallowed. Do not get in eyes or on clothing. Wear protective eyewear such as goggles or safety glasses. Thoroughly wash with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet.

First Aid: If in Eyes: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice. If Swallowed: Immediately call a poison control center or doctor for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

Environmental Hazards: This product is highly toxic to fish, mammals and aquatic invertebrates. Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwaters or rinsate. This product is highly toxic to bees exposed to direct treatment or residues on blooming plants or weeds. Do not apply this product to blooming plants or weeds if bees are foraging the treatment area.

U.S. State Regulations:

California Proposition 65: This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

This product may contain substances regulated by state right-to-know regulations.

<table>
<thead>
<tr>
<th>Chemical Name / CAS Number</th>
<th>Illinois</th>
<th>Massachusetts</th>
<th>New Jersey</th>
<th>Pennsylvania</th>
<th>Rhode Island</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tetrahydrofurfuryl alcohol / 97-99-4</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

16 OTHER INFORMATION

NFPA:
Health Hazards: 2
Flammability: 1
Instability: 0
Physical and Chemical Hazards-Personal Protection: X

HMIS:
Health Hazards: 2*
Flammability: 1
Physical Hazard: 0
Physical and Chemical Hazards-Personal Protection: X
*Chronic health hazard

SDS Information:
Date Prepared: 11/09/2018
Version: 1

TreeMec® is a registered trademark of ArborSystems
DISCLAIMER

This Safety Data Sheet (“SDS”) serves different purposes than, and DOES NOT REPLACE OR MODIFY, THE EPA-APPROVED PRODUCT LABELING (attached to and accompanying the product container). This SDS provides important health, safety and environmental information for employers, employees, emergency responders and others handling large quantities of the product in activities generally other than product use, while the labeling provides that information specifically for product use in the ordinary course. Use, storage and disposal of pesticide products are regulated by the EPA under the authority of FIFRA (Federal Insecticide, Fungicide and Rodenticide Act, as Amended) through the product labeling. All necessary and appropriate precautionary, use, storage and disposal information is set forth on that labeling. It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

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