

**SAFETY DATA SHEET
WINFIELD SOLUTIONS, LLC
LAMBDA-CY AG**

1. IDENTIFICATION

EPA REGISTRATION NO. : 83222-42
PRODUCT TYPE: Insecticide
CHEMICAL NAME OF ACTIVE INGREDIENT(S): Lambda-cyhalothrin
COMPANY NAME: **Winfield Solutions, LLC**
P.O. Box 64589
St. Paul, MN 55164-0589
Phone: 1-800-424-9300

**FOR CHEMICAL EMERGENCIES, SPILL, LEAK,
FIRE, EXPOSURE, OR ACCIDENT, CALL
CHEMTREC:**

FOR MEDICAL EMERGENICES, CONTACT: Phone: 1-877-424-7452

Non-Emergency Business Inquiries: Phone: 1-855-434-6343
Mon-Fri 8am-5pm (CST)

2. HAZARDS IDENTIFICATIONS

THE FOLLOWING HAZARDS ARE IDENTIFIED ACCORDING TO OSHA HCS CLASSIFICATION (29 CFR 1910.1200). SEE SECTION 15 FOR FIFRA INFORMATION.

HAZARD CLASSIFICATIONS:

- Acute oral toxicity: Category 3
- Acute inhalation toxicity: Category 3
- Eye irritation: Category 2B
- Flammable liquid: Category 4
- Carcinogenicity – Category 2
- Aspiration - Category 1

SIGNAL WORD: Danger

HAZARD STATEMENTS:

- Harmful if swallowed.
- Harmful if contact with skin
- Cause eye irritation
- Combustible liquid
- Suspected of causing cancer (Naphthalene CAS No. 91-20-3)
- May be fatal if swallowed and enter airways (Aromatic hydrocarbon CAS No. 64742-94-5)

PICTOGRAMS:



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PRECAUTIONARY STATEMENTS:

- Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product. If swallowed: Call a poison center if you feel unwell. Rinse mouth.
- Avoid breathing dust, fume, gas, mist, vapor or spray. Use only outdoors or in a well-ventilated area. If inhaled, remove person to fresh air and keep comfortable for breathing. Call a poison center or a doctor immediately. Store locked up.
- Wash hands thoroughly after handling. 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. Wear protective gloves and clothing. If on skin, wash with plenty of water. Call a poison center if you feel unwell. Take off contaminated clothing and wash it before reuse.
- Keep away from heat and open flames, no smoking. Wear protective gloves, eye and face protection. In case of fire: Use water fog, CO₂, foam or dry chemical to extinguish.
- Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves, clothing, and eye and face protection.
- If swallowed, immediately call a poison center or a doctor. Do not induce vomiting.

Contact 1-877-424-7452 for emergency medical treatment.

PHYSICAL AND CHEMICAL HAZARDS: Combustible liquid. Do not use or store near heat or open flame. Do not use this product in or on electrical equipment due to the possibility of shock hazard.

STORAGE AND DISPOSAL: See Section 7 and 13.

OTHER HAZARDS: See Section 11 and 12.

3. COMPOSITION/INFORMATION ON INGREDIENTS

| ACTIVE INGREDIENT | CAS NUMBER | % |
|----------------------------------|------------|------|
| Lambda-cyhalothrin | 91456-08-6 | 11.4 |
| Aromatic hydrocarbon containing: | 64742-94-5 | 78 |
| Naphthalene | 91-20-3 | |
| 1-METHYLNAPHTHALENE | 90-12-0 | |
| 2-METHYLNAPHTHALENE | 91-57-6 | |

4. FIRST AID MEASURES

| FIRST AID | |
|-------------------------------|---|
| IF SWALLOWED | <ul style="list-style-type: none"> • Call a poison control center or doctor immediately for treatment advice. • Do not give any liquid to the person. • 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. |
| IF IN EYES | <ul style="list-style-type: none"> • Hold eye open and rinse slowly and gently with water 15-20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continuing rinsing eye. • Call a poison control center or doctor for treatment advice. |
| IF ON SKIN OR CLOTHING | <ul style="list-style-type: none"> • Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice. |
| IF INHALED | <ul style="list-style-type: none"> • Move person to fresh air. • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth if possible. • Call a poison control center or doctor for further treatment advice. |

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Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For medical emergencies call 1-877-424-7452.

Note to Physician – Contains petroleum distillate – vomiting may cause aspiration pneumonia.

5. FIRE FIGHTING MEASURES

FLASH POINT: 80°C (176°F)

AUTOIGNITION TEMPERATURE: Not available

FLAMMABLE LIMITS: Not applicable

EXTINGUISHING MEDIA: Water fog, foam, carbon dioxide, dry chemical, halogenated agents.

FIRE & EXPLOSION HAZARDS:

Possible toxic smoke, vapors, fallout and runoff water can result from fires depending on extent of combustion and presence of other combustible materials. Contaminated buildings, areas, and equipment must be properly decontaminated before reuse.

FIRE-FIGHTING EQUIPMENT: Self-contained breathing apparatus with full facepiece and protective clothing.

6. ACCIDENTAL RELEASE MEASURES

ACTION TO TAKE FOR SPILLS/LEAKS: This material is harmful to aquatic organisms. Releases to natural waters should be reported to appropriate water pollution control authorities. Releases of untreated effluent to the sewer should be immediately reported to the public treatment works. Make sure all personnel involved in the spill cleanup follow good industrial hygiene practices. A small spill can be handled routinely. Use adequate ventilation to prevent inhalation. Wear suitable protective clothing and eye protection to prevent skin and eye contact. Use the following procedures:

1. Do not allow material to enter streams, sewers or other waterways.
2. Spread absorbent on the liquid such as clay, sand, sawdust, or dirt. Sweep up and place in a suitable container for disposal and label the contents.
3. Rinse with a small amount of water and use absorbent to collect the wash solution. Absorb any excess liquid as indicated above, and add to the disposal container.
4. Seal drum and dispose of contaminated material in a facility permitted for hazardous waste. Large spills should be handled according to a spill plan.

7. HANDLING AND STORAGE

Do not contaminate water, food, or feed by storage and disposal.

PRECAUTIONS TO BE TAKEN IN HANDLING: Keep container closed when not in use. Handle and open container in a manner as to prevent spillage. Do not contaminate water, food or feed by storage, disposal or by cleaning equipment. Do not reuse empty container. If container is damaged or spill occurs, use product immediately or dispose of product and damaged container as indicated in Section 13.

PRECAUTIONS TO BE TAKEN IN STORAGE: Store in original containers only. Keep container closed when not in use. Do not store near food or feed. In case of spill or leak on floor or paved surfaces, soak up with sand, earth, or synthetic absorbent. Remove to chemical waste area.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

GENERAL PROTECTIVE MEASURES: Wash thoroughly with soap and water after handling. Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning and maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

SKIN PROTECTION: Long-sleeved shirt and long pants, chemical-resistant footwear plus socks.

EYE PROTECTION: Use chemical goggles. If vapor exposure causes eye discomfort, use a NIOSH approved full-face respirator.

HAND PROTECTION: Chemical-resistant gloves, such as barrier laminate or butyl rubber ≥ 14 mils.

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RESPIRATOR REQUIREMENTS: For exposures in enclosed areas, use a NIOSH approved respirator with an organic vapor (OV) cartridge or canister with any R, P or HE prefilter.

ENGINEERING CONTROLS: Use only with adequate ventilation. Local exhaust ventilation may be necessary for some operations.

USER SAFETY RECOMMENDATIONS:

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove clothing immediately after handling this product. Wash outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

EXPOSURE LIMITS:

| Chemical Name | CAS NO. | OSHA/PEL | ACGIH/TLV |
|-----------------------|------------|--|--|
| Aromatic Hydrocarbons | 64742-94-5 | NE | 100 ppm |
| Naphthalene | 91-20-3 | 10 ppm (TWA) 15 ppm (STEL) (Skin-potential for absorption) | 10 ppm (TWA) 15 ppm (STEL) 50 mg/m ³ (TWA) 75 mg/m ³ (STEL) |
| 1-METHYLNAPHTHALENE | 90-12-0 | NE | 0.5 ppm (TWA) |
| 2-METHYLNAPHTHALENE | 91-57-6 | NE | 0.5 ppm (TWA) |

NE: Not Established

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Light yellow transparent liquid

ODOR: Aromatic solvent

FLASH POINT: 80°C (176°F)

pH: 7

SPECIFIC DENSITY: NA

VISCOSITY: NA

SOLUBILITY: NA

MISCIBILITY: NA

BOILING POINT: NA

VAPOR PRESSURE: NA

10. STABILITY AND REACTIVITY

STABILITY: This product is stable under normal use and storage.

CONDITIONS TO AVOID: Heat, flames and sparks

MATERIALS TO AVOID: Oxidizing agents, alkalis, calcium hypochlorite.

HAZARDOUS DECOMPOSITION PRODUCTS: Product can decompose at high temperatures forming toxic gases.

HAZARDOUS POLYMERIZATION: Not known to occur.

11. TOXICOLOGICAL INFORMATION

ACUTE TOXICITY/IRRITATION STUDIES:

- Acute Oral LD₅₀ (Rat): 81 mg/kg
Acute Dermal LD₅₀ (Rat): >2,000 mg/kg
Acute Inhalation LC₅₀ (Rat): 0.622 mg/L air (4-hours)
Eye Irritation (Rabbit): Mildly irritating
Dermal Irritation (Rabbit): Slightly irritating
Dermal Sensitization: Not available

REPRODUCTIVE/DEVELOPMENTAL EFFECTS:

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Lambda-cyhalothrin technical: Not a developmental or reproductive toxicant.

CHRONIC/SUBCHRONIC TOXICITY STUDIES:

Lambda-cyhalothrin technical: Reversible paresthesia (abnormal skin sensation). Reversible clinical signs of neurotoxicity in mammals.

TARGET ORGANS: Lambda-cyhalothrin technical: Liver, nervous system

CARCINOGENICITY:

Lambda-cyhalothrin technical: No treatment-related tumors in rats or mice.

Naphthalene CAS No. 91-20-3

ACGIH: Not listed

IARC: 2B*

NTP: 2**

OSHA: Not listed

* Substances that may reasonably be anticipated to be carcinogens.

** Substance is possibly carcinogenic to humans.

ASPIRATION: Aromatic hydrocarbon – May be fatal if swallowed and enters airways. Based on physic-chemical properties of the material.

SPECIFIC TARGET ORGAN TOXICITY (STOT): Aromatic hydrocarbon – single exposure may cause drowsiness or dizziness.

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL HAZARDS: This pesticide is extremely toxic to fish and aquatic organisms and toxic to wildlife. Do not apply when weather conditions favor drift from treated areas. Drift and runoff from treated areas may be hazardous to aquatic organisms in neighboring areas.

To protect the environment, do not allow pesticide to enter or run off into storm drains, drainage ditches, gutters or surface waters. Applying this product in calm weather when rain is not predicted for the next 24 hours will help to ensure that wind and rain does not blow or wash pesticide off the treatment area. Rinsing application equipment over the treated area will help avoid runoff to water bodies or drainage systems.

This product is highly toxic to bees exposed to direct treatment or residues on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds if bees are visiting the treatment area.

13. DISPOSAL CONSIDERATIONS

PESTICIDE DISPOSAL: Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency or the Hazardous Waste Representative at the nearest EPA Regional Office for guidance.

CONTAINER DISPOSAL: Do not reuse or refill container. Triple rinse container (or equivalent) promptly after emptying. Dispose of product containers, waste containers, and residues according to label instructions and local, state, and federal health and environmental regulations.

14. TRANSPORT INFORMATION

DOT CLASSIFICATION:

UN 3352, Pyrethroid pesticide, liquid, toxic (lambda cyhalothrin), 6.1, PGIII

INTERNATIONAL TRANSPORTATION:

IMO (vessel): Contact registrant

IATA (air): Contact registrant

15. REGULATORY INFORMATION

FIFRA INFORMATION:

This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information for safety data sheet, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label.

WARNING May be fatal if swallowed. Harmful if inhaled or absorbed through skin. Causes moderate eye irritation. Avoid contact with skin, eyes or clothing. Avoid breathing spray mist. Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove contaminated clothing and wash clothing before reuse.

SARA TITLE III CLASSIFICATION:

Section 302: Not applicable.
Section 311/312: Acute health hazard (immediate)
Chronic health hazard (delayed)
Section 313: Naphthalene CAS # 91-20-3
1, 2, 4-trimethyl benzene CAS #: 95-63-6

CERCLA RQ: Calcium-dodecylbenzenesulphonate (CAS #: 26264-06-2) RQ = 1,000 lbs.
Naphthalene (CAS #: 91-20-3) RQ= 100 lbs

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: The ingredients of this product are listed on the TSCA inventory or are exempt.

CA PROPOSITION 65: This product contains a chemical (Naphthalene) known to the State of California to cause cancer.

STATE RIGHT-TO-KNOW:

Naphthalene (CAS No. 91-20-3) – IL, MN, NJ, PA, RI
1-Methylnaphthalene (CAS No. 90-12-0) – NJ, PA
2-Methylnaphthalene (CAS No. 91-57-6) – IL, NJ, PA, RI

16. OTHER INFORMATION

| | | | |
|----------------------|---|---|----------|
| HEALTH: | 3 | 0 | MINIMAL |
| FLAMMABILITY: | 2 | 1 | SLIGHT |
| REACTIVITY: | 0 | 2 | MODERATE |
| | | 3 | HIGH |
| | | 4 | SEVERE |

SDS DATE: 11-2-2016 (Made revisions for Winfield version). Supersedes version dated 4-27-2015.

The information herein is presented in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied, is given. Regulatory requirements are subject to change and may differ from one location to another; it is the buyer's responsibility to ensure that its activities comply with federal, state, or provincial, and local laws.