

Material Safety Data Sheet Acetamiprid 2% + Lambda-cyhalothrin 1.5% ME

1. PRODUCT IDENTIFICATION

Product Name: Acetamiprid 2% + Lambda-cyhalothrin 1.5% ME
 Common Name: Acetamiprid 2% + Lambda-cyhalothrin 1.5% ME
 Chemical Family: neonicotinoid(Acetamiprid);
 pyrethroid(Lambda-cyhalothrin)
 Chemical Formula: C₁₀H₁₁ClN₄ (Acetamiprid);
 C₂₃H₁₉ClF₃NO₃ (Lambda-cyhalothrin)
 Chemical Name: (E)-N-[(6-chloro-3-pyridinyl)methyl]-N'-cyano-N-methylethanimidamide
 (Acetamiprid);
 [1α(S*),3α(Z)]-(±)-cyano(3-phenoxyphenyl)methyl 3-(2-chloro-3,3,3-
 trifluoro-1-propenyl)-2,2-dimethylcyclopropanecarboxylate (Lambda-
 cyhalothrin)
 CAS No.: 135410-20-7 (Acetamiprid);
 91465-08-6 (Lambda-cyhalothrin).
 Product Use: Insecticide

2. COMPANY IDENTIFICATION:

Exporter:

CHICO CROP SCIENCE CO., LTD.

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 Shenzhen, China.

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3. COMPOSITION/INFORMATION ON INGREDIENTS

<u>Ingredient Name</u>	<u>CAS Registry Number</u>	<u>Typical Wt.</u>
Acetamiprid	135410-20-7	2%
Lambda-cyhalothrin	91465-08-6	1.5%
Inert	-	to balance

4. HAZARDS IDENTIFICATION

Emergency Overview

Light yellow liquid.

CAUTION!

KEEP OUT OF REACH OF CHILDREN

MAY CAUSED SKIN SLIGHT IRRITATION

MAY CAUSED EYE SLIGHT IRRITATION

Potential Health effects

Dermal contact, ingest and inhalation of the product are the primary routes to induce potential adverse health effects. Inhalation of aerosol during application of the product as part of its end use is another potential route of entry. Eye and skin irritation may occur from contact with the liquid or spray mixture.

5. FIRST AID MEASURES

If swallowed: If ingestion is suspected, using one or two glasses of water and induce vomiting by touching back of throat with finger. Never give anything by mouth to an unconscious person. Should be send to the hospital treatment immediately.

If in eye: Immediately rinse eyes with a large amount of running water. Hold eyelids apart to rinse the advice of a physician.

If on skin: Wash with plenty of soap and water, including hair and under fingernails. Do not apply any medicating agents except on the advice of a physician. Remove contaminated clothing and decontaminate prior to use.

If Inhaled: Move victim from contaminated area to fresh air. Apply artificial respiration if necessary.

Notes to Physician: There is no specific antidote, Treat symptomatically.

6. FIRE FIGHTING MEASURES

Fire and explosive Properties

Auto-Ignition Temperature	Not applicable
Flash Point	Not available, the solvent is water.

Extinguishing Media

Water fog, Carbon Dioxide, Dry Chemical, Foam and halogenated agents.

Fire Fighting Instructions

The product is not flammable. But if firing, fire fighters and others who may be exposed to products of combustion should wear full firefighting turn out gear and self-contained breathing apparatus. Firefighting equipment should be thoroughly decontaminated after use. Person who may have been exposed to contaminated smoke should be immediately examined

by a physician and checked for symptoms of poisoning. The symptoms should not be mistaken for heat exhaustion or smoke inhalation.

7. ACCIDENTAL RELEASE MEASURES

In Case of Spill or Leak

Stop the leak, if possible. Ventilate the space involved. Absorb, sweep up, place in container for disposal. Shut off or remove all ignition sources. Prevent waterway contamination. Construct a dike to prevent spreading. Protect works with water spray. Collect run-off water and transfer to drums or tanks for later disposal.

8. HANDLING AND STORAGE

Handling

Harmful if swallowed, inhaled, or absorbed through the skin. Causes eye irritation. Do not breathe gas or allow to get in eyes, on skin, or on clothing. Wash hands, arm and face thoroughly with soap and warm water after use and before eating or smoking. Wash all contaminated clothing with soap and hot water before reuse. Do not contaminate feed or food items. Keep out of reach of children.

Storage

Store in a cool dry and air ventilating warehouse and protected from light. Avoid contacting with food, feed stuff and seed.

9. EXPOSURE CONTROLS/PERSONAL PROTECTION

Eye/Face Protection

Goggles and full-face shield should be used when needed to prevent liquid from face and getting into the eyes.

Skin Protection

Avoid skin contact. Use chemical-resistant gloves, and wear long sleeves and trousers to prevent dermal exposure.

Respiratory Protection

Under normal handling conditions no respiratory protection is needed. However, if needed to prevent respiratory irritation, either a respirator approved for dusts and mists, or one approved for pesticides.

10. PHYSICAL AND CHEMICAL PROPERTIES

Color: Light yellow Liquid

Physical state:	Liquid
Odor:	N/A
Melting point	98.9 °C (Acetamiprid); 47.5-48.5 °C (Lambda-cyhalothrin)
Boiling point:	Not available. (Acetamiprid); Does not boil at atmospheric pressure (Lambda-cyhalothrin)
Decomposition point:	Not available. (Acetamiprid); Not available. (Lambda-cyhalothrin)
Vapor pressure:	$< 1 \times 10^{-3}$ mPa (25 °C) (Acetamiprid); 2×10^{-4} mPa (21 °C) (Lambda-cyhalothrin)
Density:	1.33 (20°C) (Acetamiprid); 1.33 (23 °C) (Lambda-cyhalothrin)
Solubility in water:	In water 4250 mg/l (25 °C) (Acetamiprid); In water 0.005 mg/l (pH 6.5, 20 °C). (Lambda-cyhalothrin)
Solubility in organic solvents:	Soluble in acetone, methanol, ethanol, dichloromethane, chloroform, acetonitrile and tetrahydrofuran. (Acetamiprid); In acetone, methanol, toluene, hexane, ethyl acetate >500 g/l. (Lambda-cyhalothrin)
Partition coefficient:	$K_{ow} \log P = 0.8$ (25 °C) (Acetamiprid); $K_{ow} \log P = 7$ (25 °C) (Lambda-cyhalothrin)

11. STABILITY AND REACTIVITY

Stability

Stable in buffered solutions at pH 4, 5, 7. Degraded slowly at pH 9 and 45 °C. Stable under sunlight. (Acetamiprid);

Stable to light. Stable on storage for more than 6 months at 15–25 °C. (Lambda-cyhalothrin)

Hazardous Polymerization

Does not occur.

Incompatibility

The product is not compatible with alkaline material.

Hazardous Decomposition Products

Not available

12. TOXICOLOGICAL INFORMATION

Acute Oral: Acute oral LD₅₀ for male rats 217, female rats 146 mg/kg. (Acetamiprid);
Acute oral LD₅₀ for male rats 79, female rats 56 mg/kg. (Lambda-cyhalothrin)

Acute Dermal: Acute percutaneous LD₅₀ for male and female rats >2000 mg/kg. (Acetamiprid);

Irritation:	Acute dermal LD ₅₀ for rats 632-696 mg/kg. (Lambda-cyhalothrin) No eye or skin irritation (rabbits). (Acetamiprid); Mild eye irritant; non-irritant to skin (rabbits). (Lambda-cyhalothrin)
Sensitisation:	Not a skin sensitiser (guinea pigs). (Acetamiprid); No sensitising potential. (Lambda-cyhalothrin)
Inhalation:	LC ₅₀ for rats >1.15 mg/l. (Acetamiprid) LC ₅₀ (4 h) for rats 0.06 mg/l. (Lambda-cyhalothrin)
Long-term Studies:	Negative in the Ames test. (Acetamiprid) Non-mutagenic in the Ames test. (Lambda-cyhalothrin)

13. ECOLOGICAL INFORMATION

Ecotoxicological Information

Acetamiprid:

Birds:	LD ₅₀ for mallard ducks 98, bobwhite quail 180 mg/kg. LC ₅₀ for bobwhite quail >5000 ppm.
Fish:	LC ₅₀ (0–96 h) for carp >100 mg/l. Daphnia LC ₅₀ (24 h) >200 mg/l; EC ₅₀ (48 h) 49.8 mg/l.
Algae:	ErC ₅₀ (72h) for <i>Scenedesmus subspicatus</i> >98.3 mg/l; NOEC (72h) 98.3 mg/l.
Bees:	LD ₅₀ (oral) 14.5 µg/bee; (contact) 8.1 µg/bee (EU Rev. Rep.).

Lambda-cyhalothrin:

Birds:	Acute oral LD ₅₀ for mallard ducks >3950 mg/kg. Dietary LC ₅₀ for quail >5300 mg/kg. No accumulation of residues in eggs or tissues.
Fish:	LC ₅₀ (96h) for bluegill sunfish 0.21, rainbow trout 0.36 µg/l. Daphnia Intrinsic toxicity to aquatic organisms is greatly reduced by rapid loss from the water by adsorption and degradation: EC ₅₀ (72 h) in water 0.26 µg/l, in water/sediment 31 µg/l.
Algae:	ErC ₅₀ (96 h) for <i>Selenastrum capricornutum</i> >1000 µg/l.
Bees:	LD ₅₀ (oral) 909 ng/bee; (contact) 38 ng/bee. Worms LC ₅₀ for <i>Eisenia foetida</i> >1000 mg/kg soil.

Chemical Fate Information

Acetamiprid:

Animals:	Rapidly and almost completely absorbed (>96% after 24 h) and rapidly and almost completely excreted (90% after 96 h), mainly via urine. Extensively (>90%) metabolized, mainly by oxidation and demethylation.
Plants:	Slowly degraded on or in plants, forming five identified metabolites.
Soli/Environment:	Acetamiprid is moderately to highly mobile in most soils but is not expected to be persistent in the environment. The primary degradation pathway

is aerobic soil metabolism. DT₅₀ 0.8 – 5.64 d, DT₉₀ 2.8 – 67.3 d (20°C, EU 9 soils). Koc 71.1 – 313 (US and EU soils).

Lambda-cyhalothrin:

Animals: In rats, following oral administration, rapidly eliminated in urine and faeces. The ester group is hydrolyzed, both moieties forming polar conjugates.

Plants: For details of metabolism of lambda-cyhalothrin in cotton and soya bean leaves.

Soli/Environment: Rapidly degraded in soil; DT₅₀ under lab. conditions 23 – 82 d, in the field 6 – 40 d. Strongly adsorbed to soil and sediment organic matter, Koc 330 000. Negligible potential for leaching of lambda-cyhalothrin and its degradation products through soil. Rapid dissipation from water in aquatic systems. DT₅₀ for dissipation from surface waters in lab. water-sediment systems 5 – 11 h; in a microcosm, DT₅₀ <3 h. Rapid and extensive degradation of parent compound in aquatic systems; DT₅₀ for degradation in lab. water-sediment systems 7 – 15 d; in a microcosm, DT₅₀ <3 h, DT₉₀ <3 d.

14. DISPOSAL CONSIDERATIONS

Waste Disposal

Pesticide wastes are acutely hazardous. Do not reuse product containers. Dispose product containers, waste containers, residues according local health and environmental regulations.

15. TRANSPORT INFORMATION

Not available.

16. REGULATORY INFORMATION

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

17. OTHER INFORMATION

The information contained herein relates only to the specific material identified. We believe that such information is accurate and reliable as of the date of this material safety data sheet, but no representation, guarantee or warranty, express or implied, is made as to the reliability or completeness of the information. Urge persons receiving this information to make their own determination as to the information's suitability and completeness for their particular application.

Chico Crop Science Co., Ltd.