
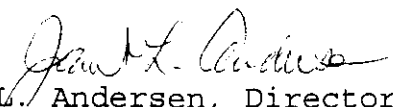


55638-49

09/14/2001

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 <p>U.S. ENVIRONMENTAL PROTECTION AGENCY Office of Pesticide Programs Biopesticides and Pollution Prevention Division (7511C) 401 M St., S.W. Washington, D.C. 20460</p> <p>NOTICE OF PESTICIDE: <u> x </u> Registration <u> </u> Reregistration</p> <p>(under FIFRA, as amended)</p>	EPA Reg. Number: 55638-49	Date of Issuance: SEP 14 2001
	Term of Issuance: Unconditional	
	Name of Pesticide Product: Lepinox XL Oil Flowable Bioinsecticide	
Name and Address of Registrant (include ZIP Code): Ecogen, Inc. 2005 Cabot Boulevard West P.O. Box 3023 Langhorne, PA 19047-3023		
<p>Note: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Biopesticides and Pollution Prevention Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.</p>		
<p>On the basis of information furnished by the registrant, the above named pesticide is hereby registered/reregistered under the Federal Insecticide, Fungicide and Rodenticide Act.</p> <p>Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.</p> <p>This product is unconditionally registered in accordance with FIFRA section 3(c)(5) provided that you:</p> <ol style="list-style-type: none"> (1) Submit and/or cite all data required for registration/reregistration of your product under FIFRA section 3(c)(5) when the Agency requires all registrants of similar products to submit such data; and submit acceptable responses required for reregistration of your product under FIFRA section 4. (2) Add the phrase "EPA Reg. No. 55638-49" to the product label. (3) Submit five (5) copies of your final printed labeling before release of the product for shipment. <p>A stamped copy of the label is enclosed for your records.</p>		
Signature of Approving Official:  Janet L. Andersen, Director, Biopesticides and Pollution Prevention Division (7511C)	Date: 9-14-01	

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ACCEPTED
SEP 14 2001
Under the Federal Insecticides, Fungicides, and Rodenticide Act, as amended, for the pesticide registered under EPA Reg. No. 55638-49

Lepinox® XL bioinsecticide is a biological insecticide for the control of lepidopteran pests.

Active Ingredient:

Bacillus thuringiensis subspecies *kurstaki* strain EG7826 solids, spores and Lepidopteran toxins.

Lepidopteran active toxin 25.0%

Inert Ingredients 75.0%

TOTAL 100.0%

2.0 lbs. active ingredient per gallon.
Percent active ingredient should not be used to adjust use rates beyond those specified in the DIRECTIONS FOR USE section.

KEEP OUT OF REACH OF CHILDREN WARNING

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

Causes substantial but temporary eye injury. Do not get in eyes or on clothing. Wear protective eyewear (goggles, face shield, or safety glasses). Harmful if absorbed through skin. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash clothing before reuse.

Personal Protective Equipment (PPE):

Applicators and other handlers must wear:

- Long sleeved shirt and long pants
- Shoes plus socks
- Mixer/loaders and applicators must wear a dust/mist filtering respirator meeting NIOSH standards of at least N-95, R-95, and P-95. Repeated exposure to high concentrations of microbial proteins can cause allergic sensitization
- Protective eyewear

Follow manufacturer's instructions for cleaning/ maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

FIRST AID

If in eyes	<p>-Hold eyes open and rinse slowly and gently with water for 15-20 minutes</p> <p>-Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye</p> <p>-Call a poison control center or doctor for treatment advice</p>
If on skin of clothing	<p>-Take off contaminated clothing</p> <p>-Rinse skin immediately with plenty of water for 15-20 minutes</p> <p>-Call a poison control center or doctor for treatment advice</p>
If swallowed	<p>-Immediately call a poison control center or doctor</p> <p>-Do not induce vomiting unless told to do so by a poison control center or doctor</p> <p>-Do not give any liquid to the person</p> <p>-Do not give anything by mouth to an unconscious person</p>

User Safety Recommendations

User should wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.

ENVIRONMENTAL HAZARDS

Do not apply directly to water or 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.

STORAGE AND DISPOSAL

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

Storage: Store in a cool, dry place inaccessible to children.

Pesticide Disposal: Do not contaminate water when disposing of equipment washwaters. Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

Container Disposal: Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incinerate, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

EPA REG. No. 55638-UO

EPA EST. No. 42761-MS-1

(Subscript refers to last 2 digits of lot number on container.)

Net Contents: 2.5 U.S.Gallons

Ecogen Inc.

2000 West Cabot Blvd., #170
Langhorne, PA 19047-1811
215/757-1590 or 800/220-2135

RECEIVED

SEP 14 2001

CPP/BPPD

NOTE TO PHYSICIAN: Contains petroleum distillate - vomiting may cause aspiration pneumonia.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

Aerial Application

Avoiding spray drift at the application site is the responsibility of the applicator. The interaction of many equipment-and-weather-related factors determine the potential for spray drift. The applicator and the grower are responsible for considering all these factors when making decisions.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. This standard contains requirements for the protection of agricultural workers on farms, forests, nurseries and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry intervals. The requirements in this section only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 4 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is: coveralls, waterproof gloves, protective eyewear, shoes plus socks.

NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses.

Do not enter treated areas without protective clothing until sprays have dried.

Lepinox XL is a bioinsecticide for use against the lepidopteran larvae listed in the attached APPLICATION RATE TABLE. Larvae must consume deposits of Lepinox XL to be affected.

Preharvest Interval: Lepinox XL may be applied to the crops listed in the APPLICATION RATE TABLE at any time, up to and on the day of harvest.

Mode of Action: After consuming a lethal dose of Lepinox XL, larvae will cease to feed, but may remain alive on foliage for several days before disappearing. Immediately after ingestion of Lepinox XL, larvae begin to move slowly, become discolored, shrivel and blacken prior to death.

MIXING INSTRUCTIONS

Lepinox XL may be applied with conventional ground, aerial or hand held application equipment with quantities of water sufficient to provide thorough coverage of infested plants. Do not apply this product through any type of irrigation system. To obtain a suitable mixture with water, add enough water to allow maximum agitation. With agitator running, slowly add in the Lepinox XL. Continue agitation. Add remainder of water and other spray materials and agitate until mixed. For best results, shake container well, empty 1/2 of contents, reshake. Do not add water to container until completely empty. Lepinox XL should be mixed well and never added before introducing water into the tank. If a sticker approved for use on growing crops is to be used, add after the addition of Lepinox XL. Maintain suspension while loading and spraying. Do not mix more Lepinox XL than can be used in a 24-hour period. Rinse and flush spray equipment thoroughly following each use. Do not contaminate water when disposing of equipment washwaters.

In order to make proper decisions on application rates to be used, follow the recommendations in the APPLICATION RATE TABLE and these guidelines:

APPLICATION INSTRUCTIONS

Lepinox XL is a bioinsecticide for use against the lepidopteran larvae listed in the APPLICATION RATE TABLE. Larvae must consume deposits of Lepinox XL to be affected. Always follow these directions:

- Make applications when larvae are still small (early instars) and actively feeding on foliage or other plant parts.
- Make applications before noticeable foliar damage occurs.
- Thorough spray coverage is essential for good insect control.
- For ground applications, directed drop nozzles should be used for certain vegetable crops.
- Do not use screens smaller than 50 mesh.
- For ground applications, use a minimum spray volume of 20 gallons per acre. For aerial applications, use a minimum spray volume of 5 gallons per acre (See cotton and soybeans for special instructions).
- When insect infestations are heavy, use the higher label rates, shorten the spray interval, and/or use larger total spray volume to improve spray coverage.
- Applications should be repeated at an interval sufficient to maintain control, depending upon plant growth, insect pressure and weather conditions after spraying.
- Local conditions may affect the use of Lepinox XL. Consult your State Agricultural Extension Specialist for specific recommendations related to local crop protection problems.
- Spray water/spray tank solutions should not exceed pH 8.0. If necessary, buffer water to near neutral pH.

TANK-MIX

Lepinox XL may be tank mixed with contact pesticides. Combinations of with commonly used insecticides, fungicides, or other spray tank adjuvants are generally not deleterious to performance (see PRECAUTIONS). It is advisable to test physical compatibility by mixing all components in small containers in proportionate quantities prior to mixing in spray tank. This product cannot be mixed with any product containing

a label prohibition against such mixing. No label dosage rate should be exceeded. Application must be made in accordance with the more restrictive of label limitations and precautions.

PRECAUTIONS

- Use caution when mixing Lepinox XL with other oil based products or surfactants approved for use on growing crops as such combinations could increase the risk of phytotoxicity. If unsure, test on a small area first.
- If any phytotoxicity occurs, discontinue use immediately.

APPLICATION RATE TABLE

I. PASTURE & HAY CROPS

Crop such as:	Insect Pest	Rate/acre
Alfalfa (hay and seed)	Alfalfa caterpillar	½ - 1 pint
Pasture (grasses & hay)	Amyworms	¾ - 2 pints
Silage	European skipper	¾ - 2 pints
	Loopers	¾ - 2 pints
	Webworm	¾ - 2 pints
	Fall Armyworm*	¾ - 2 pints

* Product should be applied when early instar larvae first appear. If infestation persists, make a second application 7-10 days later. Combination of Lepinox XL with a contact insecticide is recommended for control of 4th and 5th instar larvae.

II. FRUIT & NUT CROPS

Crop such as:	Insect Pest	Rate/Acre
Pome and Stone Fruit Trees: Apples Apricots Cherries Nectarines Peaches Pears Plums Prunes Quince	Cankerworm (Spring and Fall) Eastern tent caterpillar Fall webworm Fruitree leafroller Gypsy moth Navel orangeworm Omnivorous leafroller Oriental fruit moth Peach twig borer Redbanded leafroller Redhumped caterpillar Tortrix moth (Orange and Garden) Tufted apple budmoth Variegated leafroller Walnut caterpillar	1 - 2 pints
Nut Trees: Almonds Chestnuts Filberts Pecans Walnuts	Citrus cutworm Filbert leafroller Filbert webworm Navel orangeworm Oblique banded leafroller Peach twig borer Roughskinned cutworm	1 - 2 pints

Citrus	Amorbia Citrus cutworm Fruitree leafroller Orangedog	1 - 2 pints
Small Fruit and Berries: Blackberries Blueberries Cranberries Currants Raspberries Strawberries	Achema sphinx moth Armyworms Blueberry leafroller Fruitree leafroller Grape berry moth Gypsy moth Loopers Oblique banded leafroller Tobacco budworm	1 - 2 pints

III. FIELD CROPS

Crop such as:	Insect Pest	Rate/Acre
Cotton*	Beet armyworm Cabbage looper Cotton bollworm Cotton leaf perforator Fall armyworm Saltmarsh caterpillar Soybean looper Tobacco budworm Yellowstriped armyworm	1 - 2 pints 1 - 2 pints ½ - 2 pints ½ - 1 pint 1 - 2 pints ½ - 1 pint 1 - 1 ½ pints ½ - 2 pints 1 - 2 pints
Peanuts	Fall armyworm Green cloverworm Loopers Podworms Velvetbean caterpillar	1 - 2 pints ½ - 1 pint 1 - 1 ½ pints 1 - 2 pints ½ - 1 pint
Sorghum	European corn borer Fall armyworm Saltmarsh caterpillar Velvetbean caterpillar	1 pint 1 - 2 pints 1 pint ½ - 1 pints
Soybeans**	Green cloverworm Soybean looper Velvetbean caterpillar	½ - 1 pint 1 - 1 ½ pints ½ - 1 pint
Tobacco	Tobacco budworm Tobacco hornworm Loopers	1 - 2 pints ½ - 1 pint 1 - 2 pints

*Use of Lepinox XL in integrated pest management programs:

- Lepinox XL can be used alone to control light to moderate populations of newly hatched worms at rates specified above. Repeat treatments at four to five day intervals or as long as necessary until results are acceptable.
- For early season control of cotton bollworm and tobacco budworm, Lepinox XL can be mixed with an ovicide for control of first generation worms. For mid- to late-season control Lepinox XL can be mixed with a conventional chemical, such as a synthetic pyrethroid, in accordance with the more restrictive of label limitations and precautions. No label dosage rates should be exceeded. This product cannot be mixed with any product containing a label prohibition against such mixing.
- Treat only 1st and 2nd instar larvae, as 3rd, 4th and 5th instar larvae tend to feed in squares and bolls and will not be exposed to LEPINOX XL.
- For ground applications, use a minimum of 5 gallons of water per acre. For aerial applications, use a minimum of 2 gallons of water per acre.
- Short residual contact action materials may be tank mixed with Lepinox XL to control secondary pests such as boll weevil.
- Long residual stomach action materials may be tank mixed with Lepinox XL to aid in worm control.
- Under low level infestations (less than 5% insect or egg infestation per acre), Lepinox XL can be used at 2 ounces per acre alone or in combination with foliar fertilizers or other approved applications.

**For ground applications, use a minimum of 5 gallons of water per acre. For aerial applications, use a minimum of 2 gallons of water per acre.

WARRANTY AND CONDITIONS OF SALE

Ecogen warrants that this product conforms to the description on this label and is reasonably fit for the purposes stated on this label when used in accordance with the directions on this label under normal conditions of use.

ECOGEN MAKES NO WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ABOVE.

If this product is defective, Buyer's exclusive remedy shall be the replacement of the product, or if replacement is impracticable, refund of the purchase price. In no case will Ecogen be liable for incidental, consequential or special damages resulting from the handling, storage or use of this product.

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