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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

OFFICE OF  
PREVENTION, PESTICIDES AND  
TOXIC SUBSTANCES

JAN - 8 2001

Ms. Angela Bishop  
Boehringer Ingelheim  
2621 North Belt Highway  
St. Joseph, MO 64506-2002

Subject: Agency Review of Efficacy Data, Final Printed Label  
Annihilator WP  
EPA Reg. No. 4691-163  
Your Submissions Dated May 25 and September 18, 2000

Dear Ms. Bishop:

The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, is acceptable subject to the comments listed below.

1. The review of the efficacy data you submitted May 25, 2000 was delayed because you had identified this as a "Notification". However, we have completed review of this data at this time. The study (MRID 45139801) was found to be acceptable and to support, in part, the label claims for "flies" made on the above referenced label. At 0.03% active ingredient, for the house fly, residual control was demonstrated for 28 days and for the stable fly, residual control was demonstrated through 91 days. Amend the residual control claims for flies to reflect the referenced efficacy information.
2. Per PR Notice 2000-3, amend the FIRST AID STATEMENT to read: 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." Although not required, you may also include information for other routes of exposure. Please refer to PRN 2000-3 for content and formatting information.

Please submit an updated data matrix (Agency and public copies) and the "Offer to Pay" for our files and five copies of the finished labeling prior to releasing the product for shipment. Enclosed please find a stamped label for your files.

If you have any questions regarding this letter, please contact Linda Werrell Gerber of my team at (703) 308-8033.

Sincerely,

A handwritten signature in cursive script, appearing to read "George T. LaRocca".

George T. LaRocca  
Product Manager 13  
Insecticide-Rodenticide Branch  
Registration Division (7505C)

### ANNIHILATOR WP

- \* For Use by Individuals/Firms Licensed or Registered by the State to Apply Pesticide Products
- \* For Industrial Control of Major Nuisance Pests
- \* Controls numerous pests in and around unoccupied poultry houses, horse stalls, cattle barns, and swine and other livestock buildings
- \* For Use in Non-Food/Non-Feed Areas of Food/Feed Processing Plants

**ACTIVE INGREDIENT:**

|   |               |
|---|---------------|
| Deltamethrin: (s)-cyano-3-phenoxybenzyl-(1R,3R)-3-(2,2-dibromovinyl)-2,2-dimethyl-cyclopropanecarboxylate ..... | 5.00%         |
| <b>OTHER INGREDIENTS:</b> .....   | <u>95.00%</u> |
|   | 100.00%       |

EPA Reg. No. 4691-163 EPA Est. No. 4691-KS-01

**KEEP OUT OF REACH OF CHILDREN**

### CAUTION

#### FIRST AID

If in Eyes: Flush eyes with plenty of water. Call a physician if irritation persists.

See Side Panel For Additional Precautions

NET CONTENTS: 1 lb.

Boehringer Ingelheim Vetmedica, Inc.  
St. Joseph, Missouri 64506-2002 U.S.A.  
(800) 821-7467

ACCEPTED  
with COMMENTS  
In EPA Letter Dated:

JAN - 8 2001

4691-163

### PRECAUTIONARY STATEMENTS

#### Hazards To Humans & Domestic Animals

##### CAUTION

Causes moderate eye irritation. Contact with product may cause transient tingling and reddening of the skin. Avoid contact with eyes, skin or clothing. Wash thoroughly with soap and water after handling.

##### Environmental Hazards

This product is extremely toxic to fish and other aquatic organisms. Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Use with care when applying in areas adjacent to any body of water. Do not contaminate water when disposing of equipment washwaters. Remove pets and cover aquariums and terrariums before spraying.

##### Physical & Chemical Hazards

Do not use water based sprays of Annihilator WP in conduits, motor housings, junction boxes, or other electrical equipment because of possible shock hazard.

##### DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

##### STORAGE & DISPOSAL

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

**Storage:** Mix as needed. Do not store diluted material. Store in original container in secured dry storage area. Prevent cross-contamination with other pesticides and fertilizers. If the container is leaking and/or material is spilled on floor or paved surfaces, sweep up and remove to chemical waste area.

**Pesticide Disposal:** Wastes resulting from use of this product may be disposed of on site or at an approved waste disposal facility.

**Container Disposal:** Empty container completely into application equipment. Do not reuse empty container. Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by incineration, or if allowed by state and local authorities, by burning. If burned, stay out of smoke.

**General Information:** Annihilator WP is a wettable powder insecticide containing 5.0% by weight active ingredient which will provide effective knockdown and long residual control up to 60 days of flies and various insect pests in and around non-residential buildings and structures and on various modes of transport.

Annihilator WP does not damage paints, plastics, fabrics or other surfaces where water alone causes no damage. To ensure against possible damage to delicate material, test a small inconspicuous area before treatment.

##### INDOORS

Annihilator WP is intended to be mixed with water and applied indoors as crack and crevice, spot and broadcast treatments with pressurized sprayers or other equipment suitable for applying insecticides to localized areas. To minimize airborne particles, spray pressure should not exceed 30 psi at the nozzle tip.

**Handling Procedures:** Wear protective clothing when using or handling this product to help avoid exposure to eyes and skin. As a minimum, eye protection and chemically resistant gloves, a long-sleeved shirt and long-legged pants or coveralls are recommended. To avoid breathing spray mist during application in confined areas, wear a mask or respirator of a type recommended by NIOSH for filtering spray mists.

Adults, children and pets should not contact treated surfaces until spray has dried. Do not treat pets with this product. Before spraying, remove pets, cover aquaria and turn off air pump. Do not apply where electrical short circuits could occur. Do not use indoors as a space spray or in fogging equipment. It is recommended that eye protection be worn when making applications overhead.

**Treatment Sites:** When used in accordance with label directions, Annihilator WP may be applied in and around non-residential buildings and structures. This product can be applied to walls, floors, ceilings, in and around cabinets, between, behind and beneath equipment and appliances, around floor drains, window and door frames, and around plumbing, sinks and other possible pest harborage sites. Permitted areas of use include, but are not limited to, the non-food/non-feed areas of:

- |                          |                            |
|--------------------------|----------------------------|
| buses                    | railcars                   |
| food manufacturing,      | trucks                     |
| processing and           | unoccupied poultry houses, |
| servicing establishments | horse stalls, cattle barns |
| warehouses               | industrial buildings       |
| laboratories             | and installations          |

Treatments may be applied at 21-day intervals or as necessary to maintain adequate control.

**Mixing Instructions:** Annihilator WP is intended to be mixed with water and applied with hand pressurized or power operated sprayers as a coarse spray. When diluting, add water to the spray tank and the appropriate amount of Annihilator WP. Thoroughly agitate the sprayer before using to insure proper suspension of the wettable powder. Re-invert sprayer before use if spraying is interrupted. If spray screens are used, they should be 50 mesh or larger. Dilute Annihilator WP insecticide only with water.

**Dosage Chart:** This product is intended for dilution prior to applications as directed in the following table. Use the scoop provided for measuring from the jar. Each level scoopful contains 0.8 oz Annihilator WP.

**Tank Mixing:** Unless prohibited by a product's label, users at their own discretion can tank-mix pesticides such as insect growth regulators currently labeled for similar use patterns. It is always recommended that a small jar compatibility test using proper proportions of chemicals and water be run to check for physical compatibility prior to tank-mixing.

| Pests   | Concentration of Active Ingredient | Dilution Rate Per Gallon of Final Spray |
|---|------------------------------------|---|
| ants, bees, centipedes, cockroaches (maintenance rate), flies (including such flies as stable, house, cluster and horse flies), firebrats, gnats, hornets, killer bees, midges, mosquitoes, silverfish, yellow jackets, wasps | 0.03% w/w                          | 1 scoop                                 |
| bedbugs, carpet beetles, cockroaches (clean out rate), crickets, fleas, lice, pillbugs, scorpions, sowbugs, spiders, ticks  | 0.06% w/w                          | 2 scoops                                |
| carpenter ants  | 0.03% w/w                          | 1 scoop                                 |

**Application Methods**

This product may be applied as crack and crevice, spot, general surface and broadcast treatments. Treat where pests are found or normally occur.

**Crack and Crevice Applications:** Use a low pressure system with a pinpoint or variable pattern nozzle to apply the spray mixture to areas such as floors, cracks and crevices in and around baseboards, walls, expansion joints, areas around water and sewer pipes, and voids formed by equipment or appliances.

**Spot and Broadcast Applications:** Use a low pressure system with fan-type nozzle to uniformly apply spot treatments between, beneath and behind equipment or appliances.

**Premise Pest Control:** Apply as a coarse, low pressure spot or crack and crevice spray to areas that pests normally inhabit. Pay particular attention to dark corners of rooms and closets; floor drains; cracks and crevices in walls; along and behind baseboards; around plumbing and other utility installations, doors, windows and in attics and crawl spaces. Applications may be made to floor surfaces along baseboards and around air ducts.

**Pet Kennels:** For residual control of crawling and flying insects in and around these structures, apply as a general surface and/or crack and crevice spray. Optimal control results if facilities to be treated are clean and if the exterior perimeter is concurrently treated with Annihilator WP. Apply only to areas of facility where animals are not present. Allow spray to dry before allowing re-entry of animals into treated areas. Do not apply to animal feed or watering equipment.

**FOOD/FEED HANDLING ESTABLISHMENTS**

Do not use in food/feed areas of food/feed handling establishments, restaurants or other areas where food/feed is commercially prepared or processed. Do not use in serving areas while food is exposed or facility is in operation. Serving areas are areas where prepared foods are served, such as dining rooms, but excluding areas where foods may be prepared or held. Do not use in Federally Inspected Meat and Poultry Plants.

**NON-FOOD/NON-FEED AREAS:** Annihilator WP may be applied as a general, spot or crack and crevice treatment in non-food/non-feed areas. Non-food/non-feed establishment areas are areas such as garbage rooms, lavatories, floor drains (to sewers), entries and vestibules, offices, locker rooms, machine rooms, boiler rooms, mop closets and storage (after packaging, canning or bottling). All areas that insects inhabit or through which insects may enter should be treated.

**INDOOR PESTS CONTROLLED BY ANNIHILATOR WP**

- |                                |                        |
|--------------------------------|------------------------|
| Ants <sup>(1)</sup>            | Firebrats              |
| Beetles                        | Fleas <sup>(9)</sup>   |
| Brown dog ticks <sup>(2)</sup> | Mosquitoes             |
| Centipedes                     | Silverfish             |
| Cockroaches <sup>(3)</sup>     | Scorpions              |
| (American)                     | Sowbugs                |
| (Asian)                        | Spiders                |
| (brown-banded)                 | Ticks                  |
| (German)                       | and other insect pests |
| (oriental)                     |                        |
| (smoky brown)                  |                        |
| Crickets                       |                        |

Numbers refer to "Specific Indoor Use Directions".

**Specific Indoor Use Directions**

1. Ants may be controlled by treating ant trails and wherever else these pests may find entrance; for example, around doors and windows.
2. For control of brown dog ticks, thoroughly apply the spray to infested areas, such as cracks and crevices, along baseboards, windows and door frames, and areas of floor and floor coverings where these pests may be present. Non-carpeted flooring should only be treated with spot applications as necessary. Spots are defined as areas not exceed two square feet. Use a 0.06% spray at the rate of 1 gallon of diluted spray per 1600 square feet. Do not treat pets with this product. Adults, children and pets should not contact treated surfaces until spray has dried.
3. Cockroaches can be controlled by making crack and crevice, spot or general surface treatments. Treat where insects are found or normally occur including, but

not limited to, floors, cracks and crevices in walls, along and behind baseboards; around plumbing, floor drains and other utility installations; and beneath and behind sinks, cabinets or other fixtures.

4. To control fleas, thoroughly apply a fine-particle spray to infested areas. An insect growth regulator may be added to achieve extended control of developing flea larvae and pupae. Non-carpeted flooring should only be treated with spot applications as necessary. Spots are defined as areas not to exceed two square feet.

Treated areas should be vacated during application, except for the applicator. Cover aquaria and fish bowls and remove other pets. Adults, children and pets should not contact treated surfaces until spray has dried. Old bedding should be replaced or thoroughly washed. Do not treat pets with this product. To control the source of flea infestations, pets inhabiting the treated premises should be treated with a flea control product registered for application to animals.

**OUTDOORS**

Annihilator WP is intended to be mixed with water and applied outdoors with pressurized sprayers as a general surface spray. The active ingredient in this product will provide effective residual control of pests listed on this label.

**Handling Procedures for General Use Outdoors:** Do not allow adults, children or pets on treated surfaces until spray has dried. Keep out of fish pools or other bodies of water. Do not treat vegetable gardens. Do not allow livestock to graze in treated areas.

**Treatment Sites:** When used in accordance with label directions, Annihilator WP may be applied to and around outside surfaces of residential and non-residential buildings and structures. Permitted areas of use include, but are not limited to:

- |              |                        |
|--------------|------------------------|
| Crawl Spaces | Garages                |
| Decks        | Lawns                  |
| Driveways    | Refuse dumps           |
| Eaves        | Walkways               |
| Fences       | Walls                  |
| Foundations  | Window and door frames |

**Mixing Instructions:** Annihilator WP is intended to be mixed with water and applied with hand pressurized or power operated sprayers as a coarse spray. When diluting, add water to the spray tank and the appropriate amount of Annihilator WP. Thoroughly agitate the sprayer before using. Re-invert sprayer before use if spraying is interrupted. If spray screens are used, they should be 50 mesh or larger. Dilute Annihilator WP insecticide only with water.

**Dosage Chart:** This product is intended for dilution prior to application as directed in the table below. Use the scoop provided for measuring from the jar. Each level scoopful contains 0.8 oz Annihilator WP.

**Tank Mixing:** Unless prohibited by a product's label, users at their own discretion, can tank-mix pesticides, such as insect growth regulators, currently labeled for similar use patterns. It is always recommended that a small jar compatibility test using proper proportions of chemicals and water be run to check for physical compatibility prior to tank-mixing.

| Concentration of Spray Mixture |        | Amount of Annihilator WP (ounce) | Amount of water (gal) |             |
|--------------------------------|--------|----------------------------------|-----------------------|-------------|
| High Conc.                     | 0.03%  | 0.80                             | 1                     | low volume  |
|                                | 0.06%  | 1.60                             | 1                     |             |
| Low Conc.                      | 0.003% | 0.80                             | 10                    | high volume |
|                                |        | 4.00                             | 50                    |             |
|                                | 8.00   | 100                              |                       |             |
|                                | 0.006% | 1.60                             | 10                    |             |
|                                |        | 8.00                             | 50                    |             |
| 16.00                          |        | 100                              |                       |             |

**Application Methods**

This product may be applied outdoors as a general surface spray. Treat where pests are found or normally occur.

**Low Volume Directed Sprays:** Application of low volume, high concentration (0.03 - 0.06%), sprays can quickly reduce localized heavy pest infestations on outside surfaces. Use a low pressure system with a pinpoint or variable pattern nozzle, such as a hand pump sprayer or backpack sprayer, and apply the spray mixture to specific areas such as cracks and crevices along walkways, patios, windows and door frames or other areas where insects may congregate or can gain entrance to the structure.

**High Volume Broadcast Sprays:** Application of high volume, low concentration (0.003 - 0.006%) sprays, such as with power spraying equipment, can help prevent infestations of buildings by reducing pests in outdoor areas. Longer residual is achieved at the higher rates (about 0.006%). This type of treatment provides more thorough coverage over large areas than low volume directed sprays. Treat by applying spray mixture directly to areas such as flower beds, junctions of soil and structural walls, under shrubs, along base of fences, and under eaves. Apply as a coarse spray at the rate of about 10 gallons spray mixture per 1000 square feet. Thoroughly and uniformly wet the treated area. Use sufficient amount of spray dilution to cover the area to the point of wetness but avoid applying to the point of runoff.

**Outdoor Pests Controlled by Annihilator WP**

- |                          |                               |
|--------------------------|-------------------------------|
| Ants                     | Fleas                         |
| Bees <sup>(1)</sup>      | Flies <sup>(2)</sup>          |
| Beetles                  | Hornets <sup>(1)</sup>        |
| Carpenter ants           | Midges <sup>(2)</sup>         |
| Centipedes               | Mosquitoes <sup>(2)</sup>     |
| Cockroaches              | Moths                         |
| (American)               | Pillbugs                      |
| (Asian)                  | Scorpions <sup>(4)</sup>      |
| (brown-banded)           | Sowbugs                       |
| (German)                 | Spiders                       |
| (oriental)               | Ticks                         |
| (smoky brown)            | Wasps <sup>(1)</sup>          |
| Crickets                 | Yellow Jackets <sup>(1)</sup> |
| Fire ants <sup>(2)</sup> | and other outdoor insects     |
- Numbers refer to "Specific Outdoor Use Directions".

**Specific Outdoor Use Directions**

- Wasps, Hornets, Yellow Jackets & Bees -**  
Application should be made late in the evening when insects are at rest. Aim spray at nest openings in ground, bushes, in cracks and crevices and under attic rafters which may harbor nests. Saturate nest and contact as many insects as possible.
- Fire ant mounds may be controlled by applying Annihilator WP as a drench.** Dilute 1.8 oz per 2 gallons of water. Gently sprinkle 1 to 2 gallons of the diluted insecticide over the surface of each mound and surrounding area to a 2 foot diameter. For best results, apply in cool weather, 65 to 80° F, or in early morning or late evening hours. Treat new mounds as they appear. Pressurized sprays may disturb the ants and cause migration, reducing product effectiveness.

- 3. Flies, midges and mosquitoes may be controlled by spraying outside surfaces of doors, screens, window frames, or wherever these insects may enter the room. Also, spray surfaces around light fixtures on porches, in garages and other places where these insects alight or congregate.
- 4. Scorpions may be controlled by removing accumulations of lumber, firewood and other materials serving as harborage sites. Before stacking firewood or lumber, apply Annihilator WP as a localized spray to surfaces immediately below such materials. Do not treat firewood directly. Broadcast sprays outdoors may assist in reducing pests migrating from surrounding areas.

**FOR CONTROL OF WOOD-INFESTING INSECTS**

Annihilator WP is intended to be mixed with water and applied as a general surface or localized injection treatment with pressurized sprayers or other equipment suitable for applying insecticides to localized areas.

**Handling Procedures:** Contact with treated surfaces should be avoided until spray has dried. Cover or remove exposed foods before treatment. Before spraying, remove pets, cover aquaria and turn off air pump. Do not apply where electrical short circuits could occur.

**Treatment Sites:** When used in accordance with label directions, Annihilator WP can be applied to residential and non-residential buildings and structures for control of wood-infesting insects. Permitted areas of use include but are not limited to:

- crawl spaces
- gaps between wooden members
- junctions between wood and foundation
- voids and channels in damaged wood
- wall voids
- wood surfaces

**Mixing Instructions:** To make a 0.03% water-based spray, mix 0.8 ounces (1 scoop) of Annihilator WP per gallon of spray mixture. To make a 0.06% water-based spray, mix 1.6 ounces (2 scoops) of Annihilator WP per gallon of spray mixture. When diluting, add water to the spray tank and the appropriate amount of Annihilator WP. Thoroughly agitate the sprayer before using to insure proper suspension of the wettable powder. Re-invert sprayer before use if spraying is interrupted. If spray screens are used, they should be 50 mesh or larger. Dilute Annihilator WP insecticide only with water.

**Dosage Rates:** Applications of 0.03% to 0.06% Annihilator WP can be made depending on pest species and method of application. Expect increased residual control of higher rates. See "Specific Use Directions For Control of Wood-Infesting Insects" for additional information.

**Tank Mixing:** Unless prohibited by a product's label, users at their own discretion can tank-mix pesticides such as insect growth regulators currently labeled for similar use patterns. It is always recommended that a small jar compatibility test using proper proportions of chemicals and water be run to check for physical compatibility prior to tank-mixing.

**Application Methods**

This product may be applied either as a coarse spray or by brushing onto targeted surfaces. Equipment capable of delivering a coarse, low pressure (about 20 psi) spray is recommended for treatment of large or overhead areas. Inaccessible areas such as wall voids can be treated by injecting the spray mixture under low pressure (about 20 psi) through drilled openings. Use sufficient amount of spray dilution to cover the area to the point of wetness but avoid applying to the point of runoff.

Drilling may be necessary prior to applying Annihilator WP to voids, cracks or joint spaces in vulnerable locations and to channeled section of wood but it must be recognized that such drilling and treating may not result in complete coverage of infested and vulnerable voids. All treatment holes drilled in construction elements in commonly occupied areas of structures must be securely plugged. Inspect at 6 months and 1 year to insure that the colony has been killed. Retreat if needed.

**Overhead Areas:** It is recommended that, when spraying overhead areas, care should be taken to avoid dripping or runoff from contacting applicator.

**Wood-Infesting Insects Controlled by Annihilator WP**

- beetles<sup>(1)</sup>
  - (Anobiidae)
  - (Bostrichidae)
  - (Cerambycidae)
  - (Lyctidae)
- Carpenter ants and other wood-infesting ants<sup>(2)</sup>
- Carpenter bees

Numbers refer to "Specific Use Direction for Control of Wood-Infesting Insects".

**Specific use Directions for Control of Wood-Infesting Insects**

- 1. Beetles may be controlled by applying spray mixture to infested areas, or areas where infestations are likely to occur. This includes but is not limited to wood surfaces, voids and channels in damaged wood, spaces between wooden members of a structure and junctions between wood and foundations. Apply to wetness but avoid runoff.
- 2. Wood-Infesting ants may be controlled by applying spray mixture around doors and windows, cracks or crevices, or other areas where ants may enter, crawl or hide.

Primary colonies are typically found outside through an exterior inspection. Correction of sanitation and structural deficiencies or landscape modifications may be necessary for effective control.

~~NOTICE: Buyer assumes all responsibility for safety and use not in accordance with directions.~~

**Warranty and Limitation of Damages**

Seller warrants that this material conforms to its chemical description and is reasonably fit for the purpose stated on the label when used in accordance with directions under normal conditions of use and Buyer assumes the risk of any use contrary to such directions. Seller makes no other express or implied warranty, including any other express or implied warranty of fitness or of merchantability, and no agent of Seller is authorized to do so except in writing and with specific reference to this warranty. In no event shall Seller's liability for any breach of warranty exceed the purchase price of the material as to which a claim is made.