



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

JUN 1 - 1994

OFFICE OF  
PREVENTION, PESTICIDES AND  
TOXIC SUBSTANCES

Lynn G. Pierce  
ZOECON CORPORATION  
A SANDOZ COMPANY  
12200 DENTON DRIVE  
DALLAS, TX 75234

Subject: Label Amendment Submission of 01/18/94 in Response to PR Notice 93-7  
EPA Reg. No. 2724-452  
APEX

Dear Registrant:

The labeling cited above and submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended, is accepted subject to the comments reflected on the enclosed sheet. A copy of your proposed labeling stamped "ACCEPTED WITH COMMENTS" is enclosed.

**WHAT THIS ACCEPTANCE MEANS:**

Based on your certification, the Agency has accepted the labeling changes that are necessary to comply with the Worker Protection Standard (WPS) labeling requirements of 40 CFR part 156, subpart K, described in PR Notices 93-7 and 93-11. Any other labeling changes submitted in connection with this amendment application but not directly related to compliance with the WPS have not been reviewed or accepted by the Agency. If you wish to make such changes, you must submit a separate amendment application proposing them. If your product is currently suspended, the acceptance of this labeling amendment does not affect the suspension in any way.

**WHAT YOU NEED TO DO NEXT:**

By the next label printing make all the specified changes to your labeling. Send to EPA one (1) copy of the final printed labeling:

- BEFORE selling or distributing any product bearing the final printed labeling
- AND
- WITHIN one year from date of this acceptance.



Recycled/Recyclable  
Printed with Soy/Canola Ink on paper that  
contains at least 50% recycled fiber

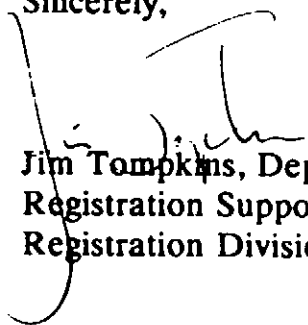
Submit the final printed labeling via the U.S. Postal Service to:

Document Processing Desk (FIN-LABEL)  
Office of Pesticide Programs (7505C)  
U.S. Environmental Protection Agency  
401 M Street, SW  
Washington, D.C. 20460-0001

Hand or courier deliveries of final printed labeling may be made to:

Document Processing Desk (FIN-LABEL)  
Office of Pesticide Programs  
Room 266A, Crystal Mall 2  
1921 Jefferson Davis Highway  
Arlington, VA 22202

Sincerely,



Jim Tompkins, Deputy Chief  
Registration Support Branch  
Registration Division (7505W)

Attachment

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Office of Pesticide Programs  
Registration Division

Lynn G. Pierce  
ZOECON CORPORATION  
A SANDOZ COMPANY  
12200 DENTON DRIVE  
DALLAS TX 75234

Comment for: EPA Reg Nr.2724-452  
ZOECON APEX 5E

The following specific comments pertain to your WPS labeling submission concerning the product cited above:

Add the following statement to the "Personal Protective Equipment" section of your label: "Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry." The exact location for this statement is shown in Section A on Part 1 of the Product Worksheet in Supplement Three-A to PR Notice 93-7.

The glove requirement for "applicators and other handlers" in the Personal Protective Equipment" section on your proposed labeling is missing or does not match the chemical-resistance category identified on your proposed labeling. Correct the chemical-resistance category statement (if necessary) to state: "Some materials that are chemical resistant to this product are listed below. If you want more options, follow the instructions for category F on an EPA chemical resistance category selection chart." Remove the incorrect glove requirement (if any) and add "Chemical-resistant gloves, such as barrier laminate, butyl rubber, nitrile rubber or viton". The exact location is shown in Sections A and B on Part I of the Product Worksheet in Supplement Three-A to PR Notice 93-7.

Add the following statement to the Directions For Use section on your labeling immediately above the Agricultural Use Requirements box: "For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation." The exact location is shown in Section F on Part 2 of the Product Worksheet in Supplement Three-A to PR Notice 93-7.

✓

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ZOECON CORPORATION  
EPA Reg. Number: 2724-452  
ZOECON APEX 5E  
Application date: 04/18/94  
Original Submission

The glove requirement for early entry in the Agricultural Use Requirements box on your proposed labeling is missing or incorrect. Remove the incorrect requirement (if any) and add "Chemical-resistant gloves, such as barrier laminate or butyl rubber or nitrile rubber or viton". The exact location is shown in Sections F and G on Part 2 of the Product Worksheet in Supplement Three-A to PR Notice 93-7.

Correct the typographical errors circled on your proposed label.

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# APEX® 5E

AN INSECT GROWTH REGULATOR TO PREVENT THE EMERGENCE OF ADULT SCIARID FLIES IN MUSHROOM CULTURE

**ACTIVE INGREDIENT:**

Methoprene [Isopropyl (E,E)-11-Methoxy-3,7,11-trimethyl-2,4-dodecadienoate]..... 65.7%

**INERT INGREDIENTS:**..... 34.3%

This product contains 5 lbs/gallon (600 grams/liter) methoprene active ingredient.

**KEEP OUT OF REACH OF CHILDREN**

## CAUTION

SEE SIDE PANEL FOR ADDITIONAL PRECAUTIONARY STATEMENTS

## NET CONTENTS:

Zoecon Corporation  
A Sandoz Company  
12200 Denton Drive, Dallas, Texas 75234

EPA Reg. No. 2724-452 EPA Est. No. 2724-TX-1  
0492-B

ACCEPTED  
with COMMENTS  
in EPA Letter Dated  
JUN 1 - 1994

Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 2724-452

### INTRODUCTION

Methoprene, the active ingredient in APEX 5E insect growth regulator (IGR) is a chemical which acts as a growth regulator. Unlike traditional pesticides, the presence of methoprene does not result in immediate insect kill, but in delayed development. APEX 5E will prevent the emergence of adult sciarid flies when incorporated in mushroom culture. In most conditions fly control is achieved without adverse effects on mycelium growth or mushroom yield. Time of application will not be affected. If high adult populations are present initially, use of APEX 5E will give over-all results. After treatment with APEX 5E, larvae will continue to develop to the pupal stage. Fly populations should be no earlier than two weeks after treatment to assess the full benefit.

### PRECAUTIONARY STATEMENTS

**HAZARDS TO HUMANS (& DOMESTIC ANIMALS) CAUTION:** Avoid contact with eyes. In case of contact with eyes, flush with plenty of water. Get medical attention if irritation persists. **Personal Protective Equipment:** The types of PPE required for this product are listed below. If you want more options, follow the instructions for category selection chart. **Applicators and other handlers must wear:** long-sleeved shirt and long pants, chemical-resistant gloves, such as Butyl, Nitrile, Barrier Laminate or Viton (2-14 mils). Follow manufacturer's instructions for use of hot water. Keep and wash PPE separately from other laundry.

**DIRECTIONS FOR USE - GENERAL CLASSIFICATION:** It is a violation of Federal law to use this product in a way that will contact workers or other persons, either directly or indirectly, in the area during application.

### AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard (WPS) for agricultural workers on farms, forests, nurseries, and greenhouses. It contains requirements for training, decontamination, notification, and emergency procedures. The requirements in this box only apply to uses of this product that are covered by the WPS. Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) to treated areas that is permitted under the Worker Protection Standard and that involves contact with plants, soil, or water; is coveralls, chemical-resistant gloves, such as Butyl or Nitrile or equivalent, plus socks. Exception: if the product is soil-injected or soil-incorporated, the Worker Protection Standard allows workers to enter the treated area if there will be no contact with anything that has been treated.

**METHOD, RATE, AND TIMING OF APPLICATION:** For best results, APEX should be incorporated into casing material prior to the casing operation, or drench evenly onto the surface of the casing immediately after spawning.

- A. INCORPORATE IN CASING AT TIME OF CASING.  
Apply APEX 5E at the rate of 5 1/2 fluid oz. per 1000 sq ft. Make application evenly onto the casing operation, or drench evenly onto the surface of the casing immediately after spawning.
- B. INCORPORATE IN COMPOST AT TIME OF SPAWNING AND IN CASING AT TIME OF PLANTING.  
In Compost: Apply APEX 5E at the rate of 5-1/2 fluid oz. per 1000 sq ft. in adequate water for even distribution. Drench APEX 5E on the surface of compost at the time of spawning and thoroughly incorporate using a spawning fork.  
In Casing: Apply APEX 5E at the rate of 2-1/4 fluid oz. per 1000 sq ft. Make application evenly onto the casing operation, or drench evenly onto the surface of the casing immediately after spawning.
- C. COMPOST SURFACE DRENCH BEFORE CASING AND IN CASING AT TIME OF PLANTING.  
For those crops that have a 16-day or longer spawn run, a split application can be used. First Application, on compost: Apply APEX 5E 12-13 days after spawning. Drench APEX 5E at the rate of 5-1/2 fluid oz. per 1000 sq ft. in adequate water for even distribution. Second Application, in casing: Apply APEX 5E at the rate of 2 3/4 fl. oz. per 1000 sq ft. in adequate water for even distribution. Drench APEX 5E on the surface of casing material prior to the casing operation, or drench evenly onto the surface of the casing immediately after spawning.

### MIXING AND HANDLING INSTRUCTIONS

1. Add the measured amount of APEX 5E to a spray tank partially filled with water, mix and dilute to the desired concentration.
2. Use diluted spray solution within 48 hours of mixing. Agitate before each use.

### EFFECT ON MUSHROOMS

In most cases treatment with APEX 5E has a beneficial effect on mushroom yield through control of the widely differing practices followed in mushroom culture, the user should conduct test trials. Reduced crop yields will not occur under his own cultural conditions.

### STORAGE AND DISPOSAL: STORAGE:

Store in a cool place. Pesticides must be stored in their original containers. Do not contaminate water, food or feed by storage or disposal. In case of spill or leakage, clean up immediately. **DISPOSAL:** Triple rinse or equivalent. Then offer for recycling or reconditioning, incineration, landfill, or by other state and local procedures. Pesticide wastes can be toxic. Improper disposal is a violation of Federal Law. If these wastes cannot be disposed of by use according to label directions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office.

**BEST AVAILABLE COPY**