



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

# SPECIMEN LABEL

### ACTIVE INGREDIENT:

(S)-Methoprene (CAS #65733-16-6) . . . . . 33.6%

**OTHER INGREDIENTS\*:** . . . . . 66.4%

Total . . . . . 100.0%

\*Contains petroleum distillates

This product contains 2.5 lb/gallon (300 grams/liter) (S)-methoprene active ingredient.

EPA Reg No. 2724-427

KEEP OUT OF REACH OF CHILDREN

**CAUTION**

SEE ADDITIONAL PRECAUTIONARY STATEMENTS

### PRECAUTIONARY STATEMENTS

### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

#### CAUTION

Causes moderate eye irritation. Harmful if absorbed through skin. Avoid contact with eyes, skin, or clothing. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash clothing before reuse.

	FIRST AID
<b>If in eyes</b>	<ul style="list-style-type: none"><li>• Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li><li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eyes.</li><li>• Call a poison control center or doctor for treatment advice.</li></ul>
<b>If on skin</b>	<ul style="list-style-type: none"><li>• Take off contaminated clothing.</li><li>• Rinse skin immediately with plenty of water for 15-20 minutes.</li><li>• Call a poison control center or doctor for treatment advice.</li></ul>

<b>If swallowed</b>	<ul style="list-style-type: none"><li>• Immediately call a poison control center or doctor.</li><li>• Do not induce vomiting unless told to do so by a poison control center or doctor.</li><li>• Do not give ANY liquid to the person. Do not give anything by mouth to an unconscious person.</li></ul>
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Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact **1-800-248-7763** for emergency medical treatment information.

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

### PERSONAL PROTECTIVE EQUIPMENT (PPE):

Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for category E on an EPA chemical resistance category selection chart. Applicators and other handlers must wear: long-sleeved shirt and long pants, shoes plus socks, chemical resistant gloves, such as neoprene rubber (≥ 14 mils), nitrile rubber (≥ 14 mils), barrier laminate, or viton (≥ 14 mils). 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.

### ENGINEERING CONTROLS STATEMENTS:

When handlers use closed systems or enclosed cabs in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240 (d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

**IMPORTANT:** When reduced PPE is worn because a closed system is being used, handlers must be provided all PPE specified above for “applicators and other handlers” and have such PPE immediately available for use in an emergency, such as a spill or equipment breakdown.

**USER SAFETY RECOMMENDATIONS:**

Users should:

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

**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.

**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 interval. The requirements in this box 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.

Exception: If the product is soil injected or soil incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

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
- Chemical-resistant gloves, such as neoprene rubber ( $\geq 14$  mils), nitrile rubber ( $\geq 14$  mils), barrier laminate, or viton ( $\geq 14$  mils)
- Shoes plus socks

Do not apply this product through any type of irrigation system.

(S)-methoprene, the active ingredient in APEX® insect growth regulator (IGR) is a chemical analog of a natural insect hormone. Unlike traditional pesticides, the presence of (S)-methoprene does not result in immediate insect kill; it interferes with the normal process of insect development. APEX will prevent the emergence of adult Sciarid flies when incorporated into the mushroom growing medium. Under most conditions, fly control is achieved without adverse effects on mycelium growth or mushroom yield. Pupae and adults present at the time of application will not be affected. If high adult populations are present initially, use of a conventional adulticide will ensure the best overall results. After treatment with APEX, larvae will continue to develop to the pupal stage where they will die. Estimation of adult fly populations should be no earlier than 2 weeks after treatment to assess the full benefit of APEX.

**METHOD, RATE, AND TIMING OF APPLICATION**

For best results, APEX 5E should be incorporated in the mushroom growing medium.

Follow either METHOD A, METHOD B, or METHOD C Application Instructions.

**A. INCORPORATE IN CASING AT TIME OF CASING**

Apply APEX at the rate of  $5\frac{1}{2}$  fluid ounces (fl oz) per 1,000 square feet (sq ft). Apply evenly and mechanically mix into casing material prior to the casing operation, or drench evenly onto the surface of the casing immediately after placement.

**B. INCORPORATE IN COMPOST AT TIME OF SPAWNING AND IN CASING AT TIME OF PLACEMENT OF CASING LAYER**

**IN COMPOST**

Apply APEX at the rate of  $5\frac{1}{2}$  fl oz/1,000 sq ft in adequate water for even distribution. Spray or sprinkle on the surface of compost at the time of spawning and thoroughly incorporate using a spawning machine or other suitable mechanical means.

**IN CASING**

Apply APEX at the rate of  $2\frac{1}{2}$  fl oz/1,000 sq ft. Apply evenly and mechanically mix into casing material prior to the casing operation, or drench evenly onto the surface of the casing immediately after setting it in place.

**C. COMPOST SURFACE DRENCH BEFORE CASING AND IN CASING AT TIME OF PLACEMENT OF CASING LAYER**

For those crops that have a 16-day or longer spawn run, a split application can be used.

**FIRST APPLICATION, ON COMPOST**

Apply APEX 12-13 days after spawning. Drench APEX evenly on the surface at the rate of  $2\frac{3}{4}$  fl oz/1000 sq ft in adequate water for even distribution.

**SECOND APPLICATION, IN CASING**

Apply APEX at the rate of  $2\frac{3}{4}$  fl oz/1000 sq ft. Apply evenly and mechanically mix into casing material prior to the casing operation, or drench evenly onto the surface of the casing immediately after setting it in place.

**D. INCORPORATE IN CASING AT TIME OF CASING  
FOLLOWED BY A SURFACE APPLICATION PRIOR TO FIRST  
BREAK OF MUSHROOMS**

**FIRST APPLICATION, IN CASING**

Apply 5<sup>1</sup>/<sub>2</sub> fl oz APEX/1,000 sq ft in adequate water for even distribution and mechanically mix into the casing material prior to the casing operation.

**SECOND APPLICATION, ON CASING SURFACE JUST PRIOR  
TO FIRST BREAK**

Apply 2<sup>3</sup>/<sub>4</sub> fl oz APEX/1,000 sq ft in adequate water for even distribution as a surface drench prior to first break of mushrooms.

**MIXING AND HANDLING INSTRUCTIONS**

1. Add the measured amount of APEX to a spray tank partially filled with water, mix, and complete filling with specified quantity of water.
2. Use diluted spray solution within 72 hours of mixing. Agitate before each use.

**EFFECT ON MUSHROOMS**

In most cases, treatment with APEX has a beneficial effect on mushroom yield through control of damaging *Sciarid* fly larvae. The user can determine if reduced crop yields will occur under his own cultural conditions by conducting test treatments on small plots.

**STORAGE AND DISPOSAL**

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

**STORAGE:** Store in a cool, dry place.

**PESTICIDE DISPOSAL:** - Wastes resulting from 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 incineration, or if allowed by state and local authorities, by burning. If burned, stay out of smoke.

Seller makes no warranty, expressed or implied, concerning the use of this product other than indicated on the label. Buyer assumes all risk of use and handling of this material when such use and handling are contrary to label instructions.

For information or in case of an emergency, call 1-800-248-7763 or visit our Web site: **[www.wellmarkinternational.com](http://www.wellmarkinternational.com)**



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