

64964-62

08-11-2009

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

OFFICE OF  
PREVENTION, PESTICIDES  
AND TOXIC SUBSTANCES

AUG 11 2009

Andrew Kieniksman  
Pace International, LLLC  
5661 Branch Road  
Wapato, WA 98951

SUBJECT: Label Amendment  
Biox-Combo  
EPA Reg. No. 64864-62  
Your Submission Dated March 19, 2009  
Decision No. 408357

Dear Mr. Kieniksman:

The amended labeling referred to above submitted in connection with registration under the Federal Insecticide Fungicide and Rodenticide Act (FIFRA), as amended to revise wording in the section on Application Rates and to add more detailed information on application procedures, is acceptable.

Submit one copy of your final printed labeling with the changes before you release the product for shipment.

If you have any questions regarding this correspondence, contact Rose Kearns of my staff by phone at 703-305-5611 or via email at [kearns.rosemary@epa.gov](mailto:kearns.rosemary@epa.gov) or myself at 703-308-9443 or via email at [kish.tony@epa.gov](mailto:kish.tony@epa.gov).

Sincerely,

A handwritten signature in cursive script that reads "Rose M. Kearns".

Tony Kish  
Product Manager Team 22  
Fungicide Branch  
Registration Division (7505P)

**Biox-COMBO**

- **Anti-Sprouting Agent for Post-Harvest Treatment of Potatoes by Thermal Fogging**
- **Liquid CIPC /Clove Oil Sprout Inhibitor System**

FOR AGRICULTURAL USE ONLY

**ACTIVE INGREDIENTS:**

Chlorpropham* (Isopropyl N-(3-chlorophenyl) carbamate).....	55.4%
Clove Oil.....	43.5%
<b>OTHER INGREDIENTS</b> .....	<b>1.1%</b>
<b>Total</b> .....	<b>100.0%</b>

\*Contains 5.2 lbs chlorpropham (CIPC) per gallon

EPA Reg. No. 64864-62

EPA Est. No. 64864-WA-1

**KEEP OUT OF REACH OF CHILDREN  
CAUTION - CUIDADO**

Si usted no entiende la etiqueta, busque a alguien para que se la explique en detalle.  
(If you do not understand this label, find someone to explain it to you in detail.)

Under the Federal Insecticide, Fungicide, and Rodenticide Act, registered under EPA Reg. No. 64864-62  
 AUG 11 2009

<b>FIRST AID</b>	
<b>If on skin or clothing</b>	<ul style="list-style-type: none"> <li>• Take off contaminated clothing.</li> <li>• Rinse skin 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>• Call a poison control center or doctor immediately for treatment advice.</li> <li>• Have person sip a glass of water if able to swallow.</li> <li>• Do not induce vomiting unless told to do so by a poison control center or doctor.</li> <li>• Do not give anything by mouth to an unconscious person.</li> </ul>
<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 eye.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. In case of emergency, call ChemTrec at 1-800-424-9300.	

**PRECAUTIONARY STATEMENTS**

**Hazards to Humans and Domestic Animals**

CAUTION: Harmful if absorbed through skin. Harmful if swallowed. Causes moderate eye irritation. Avoid contact with skin, eyes or clothing. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

**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 A on an EPA chemical-resistance category selection chart.

Applicators and other handlers must wear:

- long-sleeved shirt and long pants
- chemical-resistant gloves made of any waterproof material such as polyvinyl chloride, nitrile rubber, or butyl rubber

- shoes and socks
- protective eyewear (such as goggles, safety glasses, or a face shield)

From the start of application and continuing until the ventilation requirements listed in the Entry Restrictions paragraph on this label have been completed, for entry into the enclosed area, in addition to the PPE listed above, handlers/applicators must wear:

- A full face respirator with an organic-vapor removing cartridge with a pre-filter approved for pesticides (MSHA/NIOSH approval number prefix TC-23C), or a canister approved for pesticides (MSHA/NIOSH approval number prefix TC-14G), or a NIOSH approved respirator with an organic vapor (OV) cartridge or canister with any N, R, P or HE pre-filter plus protective eyewear.

If the enclosed area contains less than 19.5% oxygen, the respirator must be one of the following types:

- A supplied-air respirator (MSHA/NIOSH approval number prefix TC-21C) or a self-contained breathing apparatus (SCBA, MSHA/NIOSH approval number prefix TX-13F) in addition to PPE listed under PRECAUTIONARY STATEMENTS.

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.

#### **User Safety Recommendations**

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing/PPE 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.

#### **ENTRY RESTRICTIONS**

Do not enter or allow any person, other than a person equipped with appropriate respirator and other PPE listed on this label, to enter the treated area until the area has been ventilated. Ventilation may be for either a total of two (2) hours with fans or other mechanical ventilation or four (4) hours with windows, vents or other passive ventilation, or until such time that there have been 10 complete air exchanges. The ventilation time may be interrupted, i.e. the time may be accumulated at sporadic intervals, such as 15 minutes of ventilation followed by a period with no ventilation, until the total required ventilation time has accumulated.

#### **ENVIRONMENTAL HAZARDS**

Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment washwaters.

#### **DIRECTIONS FOR USE**

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

#### **Application Restrictions**

Do not apply this product in a way that will contact workers or other persons. Only protected handlers may be in the area during application.

#### **Directions**

- Apply Biox-COMBO on potatoes after bruises and cuts have healed (about 6 to 15 days after harvesting) but before any signs of sprouting.
- A second application may be made 12 weeks later in anticipation of the first signs of sprouting (white spots) if prolonged storage is expected.

- Do not apply in the field.
- Do not use on seed potatoes.
- Do not allow vapors to enter storage areas used for seed potatoes.
- Let one year elapse before using treated storage area for seed potatoes. All system components (including ducts) and buildings must be thoroughly cleaned before the area is used for storage of seed potatoes.

#### Application Rate

1. Apply 0.25 – 1.4 fluid ounces of Biox-COMBO per ton (2000 lbs) of potatoes, or 1.25 – 7 fluid ounces per 100 cwt. This is equivalent to 5 – 28 ppm of CIPC.

*(Note to EPA: The following chart is considered optional and is not intended to appear on the product label, but may be used in accompanying product literature.)*

The chart below is intended for reference to explain how much CIPC and clove oil will be applied when 1 gallon of Biox-COMBO is used on various quantities of potatoes.

1 Gallon Biox-COMBO applied to	will yield	
	ppm CIPC	ppm oil
1860 cwt (93 tons)	28	22
1900 cwt (95 tons)	27.4	21.6
1940 cwt (97 tons)	26.9	21.1
2000 cwt (100 tons)	26	20.5
2100 cwt (105 tons)	24.8	19.5
2300 cwt (115 tons)	22.6	17.8
2500 cwt (125 tons)	20.8	16.4
3000 cwt (150 tons)	17.3	13.7
3500 cwt (175 tons)	14.9	11.7
4000 cwt (200 tons)	13	10.3
4500 cwt (225 tons)	11.6	9.1
5000 cwt (250 tons)	10.4	8.2
6000 cwt (300 tons)	8.7	6.8
7000 cwt (350 tons)	7.4	5.9
8000 cwt (400 tons)	6.5	5.1
9000 cwt (450 tons)	5.8	4.6
10,000 cwt (500 tons)	5.2	4.1

2. If making multiple applications, do not apply more than a total of 28 ppm of chlorpropham to potatoes in any one season.
3. Dosage may need to be modified depending on physiological state of the tubers and the seal and aeration of the storage room.
4. Biox-COMBO is compatible and may be tank mixed with Biox-C.

#### Electrofogger Operation

- Fog may be introduced through the ventilation system or directly into the room.
- When applying the fog through the ventilation system, place the discharge of the thermal fogger in the mixing chamber or supply air plenum.
- When applying directly into a storage room without a ventilation system, place the thermal fogger outside the treatment room in such a way that the discharge nozzle directly enters the room. Seal the opening around the nozzle appropriately to keep fog from escaping the room.
- Set the Electrofog machine resistance temperature between 500° to 650°C.
- Apply the fog at an exit temperature between 190 – 245°C.

- If you choose to use a different type of thermal fogger, please contact your Pace International representative or Pace-authorized Biox distributor for specific recommendations regarding the operation of the unit.

### Application Procedures

#### FORCED AIR DISTRIBUTION METHOD.

1. Insert aerosol generator intake hose in Biox Combo Aerosol liquid formulation.
2. Set air ventilation system for re-circulation.
3. Storage air system designs and Thermal Fogging application equipment vary widely. Applicators should predetermine the best location for placing the exhaust from the aerosol generating equipment so as to provide a uniform application. Examples of application set-ups: place the exhaust end of the aerosol generator in the air mixing chamber (fan-house) behind the fans or place the exhaust end of the aerosol generator in the center of the plenum in front of the fans.
4. Set air flow rates at 6 CFM / Ton or higher using storage ventilation equipment or equivalent.

#### STORAGE AND DISPOSAL

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

**PESTICIDE STORAGE:** Avoid storing below 40° F. In case of spill or leak, absorb liquid with sawdust or other absorbent material and incinerate or dispose of it in approved disposal area.

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

**CONTAINER HANDLING:** Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration.

#### NOTICE TO BUYER

**IMPORTANT:** Read the information below before using this product. If the terms are not acceptable, you should return the unopened product container immediately for a complete refund.

#### LIMITED WARRANTY, TERMS OF SALE, AND LIMITATION OF LIABILITY

Upon purchase of this product, purchaser and user agree to the following terms:

**Warranty:** To the extent consistent with applicable law, Pace International, LLC (the Company) warrants that this product conforms to the chemical description on the label in all material respects. Except as expressly stated in the foregoing sentence, the Company makes no further warranties, and expressly disclaims any implied warranties of merchantability or fitness for a particular purpose and any representation or warranty as to the suitability or efficacy of the product as a preservative or the efficacy of the thermal fogging process.

**Terms of Sale:** The Company's directions for use of this product should be followed carefully. It is impossible to eliminate all risks inherently associated with use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, and the manner of use or application (including failure to adhere to label directions), all of which are beyond the Company's control. To the extent consistent with applicable law, all such risks are assumed by the user.

**Limitations of Liability:** To the extent consistent with applicable law, the exclusive remedy against the Company for any cause of action relating to the handling or use of this product is a claim for damages, and in no event shall damages or any other recovery of any kind exceed the price of the product which caused the alleged loss, damage, injury, or other claim. To the extent consistent with applicable law, under no circumstances shall the Company be liable for any special, indirect, incidental, or consequential damages of any kind, including loss of profits or income, and any such claims are hereby waived.

The Company and the seller offer this product, and the purchaser and user accept this product, subject to the foregoing warranty, terms of sale, and limitation of liability, which may be varied or modified only by an agreement in writing signed on behalf of the Company by an authorized representative.

MADE IN USA

SKU #: \_\_\_\_\_

Lot #: \_\_\_\_\_

Net Contents: \_\_\_\_\_

Manufactured By:  
Pace International LLC  
5661 Branch Road  
Wapato WA 98951  
800.936.6750  
[www.paceint.com](http://www.paceint.com)