

MAY 28 1986

Ms. Judith Thompson  
Hopkins Agricultural Chemical Co.  
P.O. Box 7532  
Madison, WI 53707

Dear Ms. Thompson:

Subject: Amendment: Revise Labeling per  
Lindane Registration Standard  
Hopkins Lindane Emulsifiable Concentrate  
EPA Registration No. 2393-371  
Your submission dated April 3, 1986

The amendment referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act is acceptable provided that you make the labeling changes indicated below prior to release for shipment of product bearing the amended label:

1. Delete the site "Processing Plants" from the "Livestock Buildings" directions. You may choose to revise the site as "Barns and [other] Livestock Buildings" or "Livestock Buildings and Pens" as shown on page 143 of the Lindane Registration Standard. Also, delete the sentence: "Do not apply lindane in the edible product areas of processing plants.". Add the sentence: "If possible, cover water and feed troughs before spraying." directly after "Do not spray feed storage etc.".
2. The directions for use on beef cattle and hogs "every 3 to 5 days or as often as necessary" to control sarcoptic and psoroptic mange mites appear excessive. The Registration Standard, page 137, indicates use of 2 applications at 7 to 14 day intervals. Please revise the directions accordingly or justify, in writing, why more frequent applications are necessary. Also, this same section implies the use of this product in a dip but does not give specific dip vat directions, including replenishment, or the precaution to make sure that animals are well watered prior to dipping to prevent them from drinking the dip solution. If dip use is intended, then specific dip directions and precautions should be added to this section. Appropriate used dip solution disposal instructions already appear on the label.

3. The livestock spray directions should indicate the recommendation to use a sprayer capable of maintaining a pressure of 200 to 400 pounds per square inch and to use 1 to 2 gallons of spray per head for cattle and proportionately less for smaller animals.
4. Add the precaution "Do not apply to dairy goats." in the lice and ticks spray directions.
5. Correct the animal names for the use against hornflies to beef cattle, horses, and hogs [rather than Dogs].
6. Relocate "Aerial application of lindane is prohibited" to appear directly after "It is a violation of Federal law...." in the Directions for use.
7. Relocate the applicator and mixer loader precautions, including the crawl space precaution, to appear in the Directions for Use directly beneath "Aerial application ..." (item 5 above).  
Revise the crawl space precaution to read as follows:  
  
Applicators working in enclosed areas, such as crawlspaces, must wear an MSHA/NIOSH approved respirator.
8. Add the following to the end of the lawn application directions:  
  
Do not allow children or pets on treated areas until spray has dried.
9. Relocate the paragraph beginning "Harmful if swallowed." to the beginning of that section, directly after the heading "Hazards to Humans & Domestic Animals" and "Caution".  
Note that you may delete first aid advice from this section that already appears in the Statement of Practical Treatment.
10. Add as the last sentence of the Hazards to Human & Domestic Animals section:  
  
Kitchen utensils, such as tablespoons, must not be used for food purposes after use in measuring pesticides.
11. Relocate the sentences "Do not spray livestock within 30 days of slaughter and do not dip livestock within 60 days of slaughter. Do not treat any animal under 3 months of age. If any animals between 3 and 6 months require treatment, use spray method only and apply the 0.03% solution (1 pt. to 45 gal. water)." from the Hazards to Humans & Domestic Animals section to the bold print directions under the subheading USE ONLY AS SPECIFIED ON THIS LABEL. [Note that the restriction against treating 3-month-old animals already appears in this section and should not be duplicated.]

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Please submit five (5) copies of revised amended label before you release the product for shipment under the amended labeling. A stamped copy of the label is enclosed for your records.

It should be understood that future revisions to the labeling may be required based upon the results the Agency's review of the data required under the Lindane Registration Standard.

It is assumed that your comment about being "unable to change our application directions at this time as our supplier, Rohm & Haas, has not yet received acceptance of testing protocols" refers instead to Rhone Poulenc, Inc., since Rohm & Haas is not a registered lindane manufacturer.

Sincerely yours,

George T. LaRocca  
Product Manager (15)  
Insecticide-Rodenticide Branch  
Registration Division (TS-767)

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**DIRECTIONS FOR USE (Cont.)**

**STORAGE AND DISPOSAL**

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

**STORAGE:** Do not use or store near heat or open flame. Do not store below 32° F. Keep product in original container, tightly closed.

**PESTICIDE DISPOSAL:** Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency or the Hazardous Waste Representative at the nearest EPA Regional office for guidance.

**CONTAINER DISPOSAL:** Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

ACCEPTED  
with COMMENTS  
in EPA Letter Dated:

MAY 28 1986

Under the Federal Insecticide,  
Fungicide, and Rodenticide Act  
as amended, for this pesticide  
registered under EPA Reg. No.  
2393-371

**RESTRICTED**

The use of this product is restricted to protect your health. This product has been developed through laboratory animal testing and field trials following closely following precautions, and clothing specific

For retail sale to be made only under the supervision and control of the Certified Applicator or person

**NOTICE OF WARRANTY**

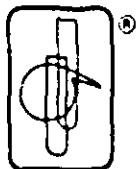
Manufacturer and Seller make no warranty of merchantability, fitness for any purpose, or otherwise, express or implied, concerning this product or its use, which extend beyond the statements on this label.

**BEST AVAILABLE COPY**

**LINDANE E  
CONCI**

For the control of Sarcophaga  
Hornflies and Lice on Animal  
Ticks on Lawns

EPA Reg. No. 2393-371  
EPA Est. No. 2393-IL-3 A, 2393-WI-1 B,  
523-IL-1 C, 2393-WI-2 A, 33509-MO-1 F.  
Superscript refers to first letter of lot number.



MANUFACTURED BY

**Hopkins**

agricultural chemical co.

BOX 7532 • MADISON, WISCONSIN 53707  
U.S.A.

**ACTIVE INGREDIENTS:**  
Lindane (Gamma isomer  
benzene hexachloride)  
Xylene-range aromatic  
**INERT INGREDIENTS:**

**TOTAL**

**KEEP OUT OF**

**C**

**DO NOT USE,  
NEAR HEA**

See Side Panel for

**NET CONTENT**

PRECAUTIONARY STATEMENTS  
**HAZARDS TO HUMANS AND  
DOMESTIC ANIMALS  
CAUTION**

ACCEPTED  
with COMMENTS  
in EPA Letter

MAY 28

Under the Federal  
Fungicide, and  
as amended, for  
registered under

2393-3

Do not treat sows within 2 weeks of farrowing nor for at least 3 weeks thereafter.

Do not use on poultry.

Do not use on lactating dairy cattle or dairy goats.

Do not use a solution stronger than 1 pint mixed in 45 gallons of water on calves and other young livestock between 3 and 6 months old, and use spray form only.

Do not use on household pets or animals. Do not spray livestock within 30 days of slaughter and do not dip livestock within 60 days of slaughter. Do not treat any animal under 3 months of age. If any animals between 3 and 6 months require treatment, use spray method only and apply the 0.03% solution. (1 pt. to 45 gal. water).

Harmful, if swallowed. May be absorbed through the skin. Avoid breathing spray mist and skin contact. In case of contact wash immediately with soap and water. In case of contact with eyes flush with water and get medical attention.

Avoid contamination of feed or foodstuffs.

Applicators must wear water resistant hat, lightweight protective suit or coveralls, unlined waterproof gloves (natural rubber, neoprene, or polyethylene), and unlined lightweight boots. Mixer/loaders must wear goggles or a face shield, waterproof apron, and unlined waterproof gloves."

Applicators working in enclosed areas, such as crawl spaces, must wear a respirator approved by OSHA (29 CFR 1910.134).

Aerial application of lindane is prohibited.

## ENVIRONMENTAL HAZARDS

This pesticide is toxic to fish, birds, and other wildlife. Do not apply directly to water or wetlands. Drift and runoff from treated area may be hazardous to fish in neighboring areas. Do not contaminate water by cleaning of equipment or disposal of wastes.

This pesticide is highly toxic to bees exposed to direct application. Applications should be timed to coincide with periods of minimum bee activity usually between late evening and early morning.

Hopkins Lindane Emulsifiable  
Conc.  
EPA Reg. No. 2393-371  
P. 3  
Mar. 27, 1986

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ACCEPTED  
with COMMENTS  
in EPA Letter Dated:

MAY 28 1986

Under the Federal Insecticide,  
Fungicide, and Rodenticide Act  
as amended, for the pesticide  
registered under EPA Reg. No.  
2393-371

## DIRECTIONS FOR USE

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

### USE ONLY AS SPECIFIED ON THIS LABEL

**FOLLOW DIRECTIONS CLOSELY, MEASURE ACCURATELY AND STIR EMULSION THOROUGHLY JUST BEFORE USING. DO NOT TREAT ANIMALS IN COLD, STORMY WEATHER. DO NOT TREAT OVERHEATED OR SICK ANIMALS. DO NOT TREAT ANIMALS YOUNGER THAN 3 MONTHS OF AGE.**

**SARCOPTIC AND PSOROPTIC MANGE ON BEEF CATTLE AND HOGS:** Use 0.06% Lindane prepared as follows: mix 3 tablespoons Hopkins Lindane E.C. to 2 gallons water or 1 quart to 45 gallons water. Wet animals thoroughly including inside of ears. Pens and shelters should be sprayed to prevent re-infection. Repeat every 3 to 5 days or as often as necessary. If animals are between 3 and 6 months old and require treatment, use spray method only and apply the 0.03% solution (1 pt. to 45 gallons water).

**HORNFLIES ON BEEF CATTLE, HORSES AND DOGS:** Spray animals thoroughly with Lindane prepared as follows: mix 1 tablespoon Hopkins Lindane E.C. to 1 1/2 gallons water or 1 pint to 45 gallons water. Repeat every 3 to 4 days or as often as necessary.

**LICE AND TICKS ON BEEF CATTLE, SHEEP AND GOATS:** Spray animals thoroughly with 0.03% Lindane prepared as follows: mix 1 tablespoon Hopkins Lindane E.C. to 1 1/2 gallons water or 1 pint to 45 gallons water. Skin and hair on sheep and goats must be thoroughly wet. Repeat as necessary.

**LICE ON HOGS:** Spray hogs with a solution not to exceed 0.06% Lindane prepared as follows: mix 3 tablespoons Hopkins Lindane E.C. to 2 gallons water or 1 quart to 45 gallons water. Repeat as necessary. Do not treat sows within 2 weeks of farrowing nor for at least 3 weeks thereafter.

**USED DIP SOLUTIONS:** Must be disposed of in accordance with the Resource Conservation and Recovery Act (RCRA). If the applicator generates more than 1000 kg (2200 lbs.) of used dip solution per month or more than 1000 kg (2200 lbs.) used dip solution in combination with hazardous waste, the material must be treated as a hazardous waste subject to subpart C of RCRA. Any user who wishes to treat, store or dispose of hazardous waste must obtain a permit to serve as a hazardous waste facility pursuant to RCRA.

**RESIDUAL CONTROL OF FLIES, ROACHES, BOXELDER BUGS, SPIDERS, ANTS, MOSQUITOES IN PROCESSING PLANTS AND LIVESTOCK BUILDINGS:** For rough surfaces spray 0.3% Lindane prepared as follows: mix 8 tablespoons of Hopkins Lindane E.C. to 1 gallon water or 1 pint to 4 gallons water. For smooth surfaces or longer residual control, spray 0.5% Lindane prepared as follows: mix 5 tablespoons Hopkins Lindane E.C. to 1/2 gallon water or 1 pint to 2 1/2 gallons water, applying 1 gallon per 500 square feet of surface or until wet to the point of runoff. For crawling insects apply thoroughly to cracks, crevices, baseboards or other hiding places. Remove animals from building before spraying. Do not spray feed storage, drinking water or feed containers. If drinking water or feed containers are sprayed accidentally, flush immediately with water. Do not apply Lindane in poultry houses, dairy barns or milkrooms. Do not apply Lindane in the edible product areas of processing plants. Do not use residual strength solution on animals.

**INSECTICIDAL PAINT FOR BARN:** Use 1.25% Lindane prepared as follows: mix 1 pint Hopkins Lindane E.C. to 1 gallon water. Paint on and around sidewalks, doors, windows, crevices, cracks and hiding places. Avoid contact with skin. Do not use in dairy barns or milk rooms.

**FLIES ON MANURE PILES, REFUSE HEAPS:** Spray with 0.125% Lindane prepared as follows: mix 1 pint Hopkins Lindane E.C. to 10 gallons water. Wet thoroughly every 3 to 4 weeks or as manure is added. Do not apply treated manure to land to be planted in root crops.

**CHIGGERS, TICKS ON LAWNS:** Spray thoroughly 0.06% Lindane prepared as follows: mix 1 pint Hopkins Lindane E.C. to 20 gallons water. 1/2 gallon of Hopkins Lindane E.C. will be sufficient to cover approximately one acre (1/2 lb. of Lindane per acre).