

US ENVIRONMENTAL PROTECTION AGENCY
OFFICE OF PESTICIDES PROGRAMS
REGISTRATION DIVISION (TS-767)
WASHINGTON, DC 20460

EPA REGISTRATION NO.
618-97

DATE OF ISSUANCE
MAY 22 1989

NOTICE OF PESTICIDE: REGISTRATION
 REREГИSTRATION
(Under the Federal Insecticide, Fungicide,
and Rodenticide Act, as amended)

TERM OF ISSUANCE
Until March 31, 1992
NAME OF PESTICIDE PRODUCT
Zc hyr 0.15 EC

NAME AND ADDRESS OF REGISTRANT (Include ZIP code)

Merck Sharp & Dohme Research Laboratories
Division of Merck & Company, Inc.
Hillsborough Road
Three Bridges, New Jersey 08887

181, 244013
181

NOTE: Changes in labeling formula differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above U.S. EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby Registered/Reregistered under the Federal Insecticide, Fungicide, and Rodenticide Act.

A copy of the labeling accepted in connection with this Registration/Reregistration is returned herewith.

Registration is in no way to be construed as an indorsement or approval of this product by this Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

The product is conditionally registered in accordance with the provisions of (A) and (B) of section 101.1 of the Federal Insecticide, Fungicide, and Rodenticide Act. You have agreed in writing to

1. Submit the following data and progress reports to the Administrator: (a) field data and progress reports to be submitted in accordance with the Good Laboratory Practice standards (40 CFR Part 160) and appropriate test guidelines as referenced in EPA's Test Methods for Registration (40 CFR Part 158)

(b) Fresh water cyclic test
EPA Reg. Number 672-5

First progress report due - June, 1991
Second progress report due - December, 1991
Final report due - October, 1991

(c) Microcosm Aquatic Study
EPA Reg. Number 672-7

First progress report due - June, 1991
Final report due - October, 1991

ATTACHMENT IS APPLICABLE

SIGNATURE OF APPROVING OFFICIAL

DATE
5/22/89

C. Simulated Mammal Field Test
Guideline Number §71-5

First progress report due - June, 1990
Final report due - October, 1991

D. Soil absorption/desorption
Guideline Number §163-1

Final report due - June, 1990

E. The results of analysis of the remaining soil core samples for the Field Dissipation Study previously submitted (Guideline Number §164-1) by July 24, 1989.

2. Submit production information (pounds or gallons produced) for this product for the fiscal year in which the use(s) on cotton is (are) conditionally registered, in accordance with FIFRA sec. 29. The fiscal year begins October 1 and ends September 30. The production information will be submitted to the Agency no later than November 15, following the end of the preceding fiscal year.

This information should be submitted to.

Registration Support Branch
Registration Division
Environmental Protection Agency
Washington, D.C. 20460

3. Make the following label changes before you release the product for shipment:

- a. Add the phrase, "EPA Registration No. 618-97.
- b. Revise the statement of practical treatment to read as follow:

If in eyes - Flush eyes with plenty of water.
Call a physician immediately."

If inhaled - Remove victim to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth.

If swallowed - Call a physician or Poison Control

Center immediately. Drink one or two glasses of water and induce vomiting by touching the back of throat with finger. Repeat until vomit fluid is clear. Do not induce vomiting or give anything by mouth to an unconscious person.

If on skin - Remove contaminated clothing and wash affected areas with soap and water. Get medical attention if irritation persists.

- c. Revise the Environmental hazard statement to read:

This pesticide is toxic to fish and wildlife. Do not apply directly to water or wetlands (swamps, bogs, marshes, and potholes). Do not apply when weather conditions favor drift from target areas. Do not contaminate water when disposing of equipment, wash water, or rinsate.

This product is highly toxic to bees exposed to direct treatment or residues on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds if bees are visiting the treatment area.

- d. There should be a space between the Restricted Use Phrase, Toxic to Fish, Mammals, and Aquatic Organisms and the statement beginning "for Retail sale to".

You should note that if you fail to satisfy any of the conditions imposed on this registration, e.g., you fail to submit the required data by the specified deadlines or the data submitted were not generated in accordance with the applicable Good Laboratory Practice Standards and test Guidelines, EPA may issue a Notice to Cancel this use under FIFRA section 6(e).

You should note that, regardless of whether you satisfy all applicable conditions, this conditional registration will expire automatically on March 31, 1992. Sale and distribution of the subject product bearing labeling for use on ~~corn~~^{cotton} after March 31, 1992 will be illegal. The tolerance authorizing residues of the subject product on corn will also expire automatically on March 31, 1993.

After that date, sale or distribution of food in interstate commerce containing any residues of the subject product will be a violation of the Federal Food, Drug, and Cosmetic Act.

4. Simultaneous Reporting to the Office of Compliance Monitoring (OCM)

OCM will be monitoring the data being generated in response to this Registration Notice. Therefore, if you respond by:

- Committing to develop and/or submitting data;
- Requesting a minor chemical exemption;
- Presenting arguments that a requirement is not applicable;
- Submitting protocols or modifications to them;
- or
- Requesting extensions on the due date for submitting final reports,

you must send a copy of the supporting information (not copies of the actual data) to:

Laboratory Data Integrity Assurance Division
Office of Compliance Monitoring (EN-342)
Environmental Protection Agency
401 M Street SW
Washington, DC 20460.

Finally, once the required data have been submitted and evaluated, EPA will entertain an application to amend the registration of the subject product to allow the unconditional use on ~~can~~ without any special restriction on the duration of the registration.

4. Submit five (5) copies of your final printed labeling before you release the product for shipment. Refer to the A-79 Enclosure for a further description of final printed

A stamped copy of the labeling is enclosed for your records.

Sincerely yours,

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

Enclosure

ZEPHYR® 0.15 EC - For Cotton
1 Gallon Label

April 19, 1989
Page 1 of 4

RESTRICTED USE PESTICIDE
Toxic to Fish, Mammals and Aquatic Organisms
For Retail sale to and use only by Certified Applicators
or Persons under their direct supervision and only
for those uses covered by the Certified Applicator's
certification

FRONT PANEL

ZEPHYR® 0.15 EC

MITICIDE/INSECTICIDE

ACCEPTED
with COMMENTS
in EPA Letter Dated:

MAY 23 1989

ACTIVE INGREDIENT

<p>Avermectin B₁ [A mixture of avermectins containing avermectin B_{1a} (5-O-demethyl avermectin A_{1a} and avermectin B_{1b} (5-O-demethyl-25-de(1-methylpropyl)-25-(1- methylethyl) avermectin A_{1a})]</p>	<p>20% 2.0%*</p>	<p>Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended for the pesticide registered under EPA Reg. No. 618-97.</p>
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INERT INGREDIENTS.....98.0%

* 1 gallon contains 0.15 pound Avermectin B₁

KEEP OUT OF REACH OF CHILDREN

WARNING

PRECAUCION AL USUARIO: Si usted no lee ingles, no use este
producto hasta que le etiqueta haya sido explicada ampliamente.

See Other Panels for Additional precautionary Statements
and Statement of Practical Treatment.

Lot

EPA EST. NO. 39578-TX-1
EPA REG. NO. 618-_____

Made in U.S.A.

U.S. Pat. 4,310,519

MSD AGVET [logo]
Division of MERCK & CO., INC.
Rahway, New Jersey 07065, U.S.A.

ZEPHYR REG TM MERCK & CO., INC.

1 GALLON

PRODUCT 68824

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

WARNING

Causes substantial but temporary eye injury. Do not get in eyes or on clothing. May be harmful if inhaled. Do not breathe spray mist. Harmful if swallowed or absorbed through the skin. Avoid contact with skin. Wear protective clothing including long sleeve shirt, long trousers, rubber gloves, and goggles or face shield when mixing and loading. During spray application, wear long sleeve shirt, long trousers, and rubber gloves. Remove any contaminated clothing and wash before reuse. Do not apply this product in such a manner as to directly or through drift expose workers or other persons. The area being treated must be vacated by unprotected persons.

STATEMENT OF PRACTICAL TREATMENT

If inhaled: Remove victim to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth.

If swallowed: Immediately give one or two glasses of water and induce vomiting by gently touching back of the throat with finger. Do not induce vomiting or give anything by mouth to an unconscious person.

If on skin: Wash with plenty of soap and water.

If in eyes: Flush with plenty of water.

Get medical attention in all cases.

Recommendations for Medical Treatment for Avermectin B₁ Acute Toxicity: Early signs of intoxication include mydriasis (dilated pupils), ataxia (unsteadiness) and muscle tremors. Toxicity following accidental ingestion of the concentrate can be minimized by inducing vomiting within one half hour of exposure.

If toxicity from exposure has progressed to cause severe vomiting, the extent of resultant fluid and electrolyte imbalance should be gauged. Appropriate supportive parenteral fluid replacement therapy should be given, along with other required supportive measures (such as maintenance of blood pressure levels) as indicated by clinical signs, symptoms and measurements.

In severe cases, observations should continue for at least several days until clinical condition is stable and normal. Since avermectin B₁ is believed to enhance GABA activity in animals, it is probably wise to avoid drugs that enhance GABA activity (barbiturates, benzodiazepines, valproic acid) in patients with potentially toxic avermectin B₁ exposure.

For emergency information, call Merck & Co., Inc. (215) 661-7300 during business hours (8:30 a.m. to 4:30 p.m. EST) or (215) 661-5000 after hours or weekends.

ENVIRONMENTAL HAZARDS

This pesticide is toxic to fish and wildlife. Keep out of lakes, ponds or streams. Do not contaminate water when disposing washwaters or rinsate.

Do not apply when weather conditions favor drift from target areas.

This product is highly toxic to bees exposed to direct treatment or residues on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds if bees are visiting the treatment area.

REENTRY STATEMENT

Do not reenter treated areas until sprays have dried.

ACCEPTED
with COMMENTS
in EPA Letter Dated:

PHYSICAL/CHEMICAL HAZARDS

Do not use or store near heat or open flame.

MAY 23 1989

DIRECTIONS FOR USE

Under the Federal Insecticide,
Fungicide, and Rodenticide Act as
amended, for the pesticide
registered under EPA Reg. No.
618-97

It is a violation of Federal (U.S.A.) law to use this product in a manner inconsistent with its labeling.

COTTON: ZEPHYR® 0.15 EC is an emulsifiable concentrate containing 0.15 lb avermectin B₁ per gallon, which when mixed with water according to the Directions for Use, will control Spider mites (twospotted, carmine, strawberry and Pacific) on cotton.

For control of spider mites on cotton, mix with water and apply at the rates given in the following table:

<u>Spider Mites</u>	<u>Fluid Ounces Per Acre</u>
Twospotted	8 - 16
Carmine	
Pacific	
Strawberry	

Use 8 - 16 fl oz ZEPHYR per acre depending on size of the plant and density of the foliage. Apply with ground sprayers or aerially by fixed-wing aircraft or helicopter in a minimum of 5 gallons of water per acre to provide thorough coverage. Begin application when mites are first noticed and repeat if necessary.

USE RESTRICTIONS

- Do not apply more than 48 fl oz ZEPHYR per acre per year.
- Do not apply within 20 days of harvest.
- Do not graze or feed cotton foliage.
- Do not apply this product through any type of irrigation system.

S T O R A G E A N D D I S P O S A L

Storage: Store in a tightly closed container in a cool, dry place.

Prohibitions: Do not contaminate water, food or feed by storage or disposal. Open dumping is prohibited. Do not reuse empty container.

Pesticide Disposal: Pesticide spray mixture or rinsate that cannot be used or chemically reprocessed should be disposed of in a landfill approved for pesticides or buried in a safe place away from water supplies. Improper disposal of excess pesticide spray mixture or rinsate is a violation of Federal (U.S.A.) law. If these wastes cannot be disposed of by the 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) and dispose in an incinerator or landfill approved for pesticide containers.

CONDITIONS OF SALE AND WARRANTY

Notice of Warranty: The Directions for Use of this product reflect the opinion of experts based on field use and tests. The directions are believed to be reliable and should be followed carefully. However, 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, or the manner of use or application all of which are beyond the control of MSD AGVET or the Seller. Treatment may not be effective if tolerant strains of spider mites develop. Use of alternate treatments should be considered if treatment with ZEPHYR proves ineffective. All such risks of use shall be assumed by the buyer.

MSD AGVET warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes referred to in the Directions for Use subject to the inherent risks referred to above. Buyer assumes all risks of use or handling which are at variance in any way with the directions hereon. MSD AGVET makes no other express or implied warranty of Fitness or Merchantability or other express or implied warranty. In no case shall MSD AGVET or the Seller be liable for consequential, special or indirect damages resulting from the use or handling of this product. MSD AGVET and the Seller offer this product and the buyer and user accept it, subject to the foregoing Notice of Warranty which may be varied only by agreement in writing signed by a duly authorized representative of MSD AGVET.

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