

Ms. Carolyn Bussey
Ciba-Geigy Corporation
P.O. Box 18300
Greensboro, NC 27419

NOV 30 1988

Subject: Amendments -- Revise per May 1, 1987 Comprehensive DCI:
Limit aerial application to head lettuce and tomatoes;
Prohibit use on hand-harvested commercially grown potatoes;
Specify succulent peas and sweet corn only;
Delete alfalfa, clover, corn, and pines;
Delete endangered species restrictions
Revise chemigation heading
Revise re-entry statement
Declare solvent as inert
Alfa-tox
EPA Reg. No. 100-472
Your submission dated November 14, 1988

Dear Ms. Bussey:

The amendments referred to above, submitted in connection with a registration under the Federal Insecticide, Fungicide, and Rodenticide Act, are acceptable provided the following revisions are made prior to release for shipment:

- 1) The active ingredient should be declared as follows:

Diazinon [O,O-Diethyl O-(2-isopropyl-6-methyl-4-pyrimidinyl) phosphorothioate]

- 2) Revise the solvent footnote to: "Contains xylene range aromatic solvent". It is assumed that you have not changed solvents from that previously declared.
- 3) Add "Recommended for Agricultural or Commercial Use Only" to the top of the front panel. Based upon the dilution rates (i.e., per 100 gallons) and the aerial use directions, this is clearly not a homeowner use product.
- 4) In the "General Information" section, revise "... and desirable trees,..." to "... and desirable ornamental trees, ...", based upon your response to the Groundwater Data Call-In.

- 5) Delete the heading "Forage Insects", since there are no longer any directions for use in this category.
- 6) In the directions for use on potatoes, add: "Do not use on commercially grown potatoes which will be hand harvested." to the pre-harvest interval "Note".
- 7) You must specify ornamental trees in the directions for "Foliage Insects" to be in agreement with your response to the Groundwater Data Call-In. While this may be accomplished in several ways, the easiest would be to revise the heading "Foliage Insects" to "Foliage Insects of Ornamental Trees, Shrubs, and Flowers".
- 8) In the Statement of Practical Treatment, "If swallowed" advice, revise the last sentence to read: "Do not induce vomiting or give anything by mouth if person is unconscious or convulsing."
- 9) Revise the first two sentences of the "Environmental Hazards" to read:

This product is toxic to birds, fish, and wildlife including waterfowl. Birds, including waterfowl, feeding on treated areas may be killed.

A stamped copy of the label is enclosed for your records. Please submit five (5) copies of the revised amended label prior to release for shipment.

Sincerely yours,

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

Alfa-tox®

Insecticide

For control of insects on
vegetables, small fruits, shade
trees, ornamentals and flowers

Five Gallons
U.S. Standard Measure

ACCEPTED
with COMMENTS
in EPA Order 5110

NOV 30 1988

Under the Federal Insecticide,
Fungicide, and Plant Nematicide
Act, registered by the pesticide
label under EPA Reg. No.
100-472

Active Ingredients:

*Methoxychlor, technical	20%
Diazinon: O,O-diethyl O-(2-isopropyl-6-methyl- 4-pyrimidin-yl) phosphorothioate	10%
<u>Inert Ingredients:**</u>	<u>70%</u>
Total:	100%

*Equivalent to 17.6% 2,2-bis (p-methoxyphenyl)-1,1,1-trichloroethane and 2.4% other isomers and reaction products.

**Contains xylene.

Alfa-tox contains 0.8 lb. of diazinon and 1.6 lbs. of methoxychlor per gallon.

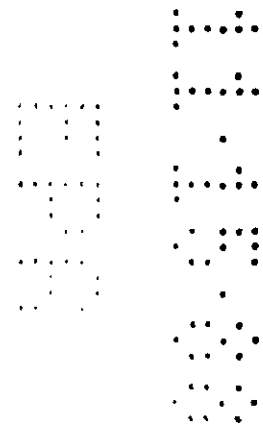
KEEP OUT OF REACH OF CHILDREN.

CAUTION

See additional precautionary statements left of container seam.

See directions for use on panel at right.

CIBA-GEIGY



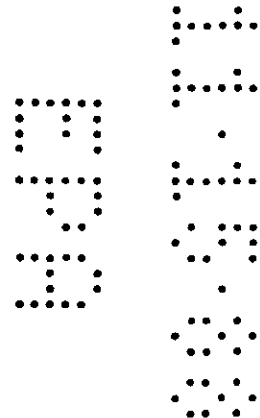
DIRECTIONS FOR USE AND CONDITIONS OF SALE AND WARRANTY

IMPORTANT: Read the entire Directions for Use and the Conditions of Sale and Warranty before using this product.

Conditions of Sale and 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 CIBA-GEIGY or the Seller. All such risks shall be assumed by the Buyer.

CIBA-GEIGY 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. CIBA-GEIGY makes no other express or implied warranty of Fitness or Merchantability or any other express or implied warranty. In no case shall CIBA-GEIGY or the Seller be liable for consequential, special, or indirect damages resulting from the use or handling of this product. CIBA-GEIGY and the Seller offer this product, and the Buyer and user accept it, subject to the foregoing Conditions of Sale and Warranty, which may be varied only by agreement in writing signed by a duly authorized representative of CIBA-GEIGY.



General Information

Alfa-tox is an emulsifiable solution which is to be diluted with water. When ground applications are to be made, dilute Alfa-tox with water according to the Directions for Use section.

Alfa-tox is intended for use against insect pests of agricultural crops and desirable trees, shrubs, and flowers. Alfa-tox should not be used in barns or dwellings. Do not use Alfa-tox on commercially grown potatoes which will be hand-harvested. Applications should be repeated as necessary to maintain control.

Aerial Application

Alfa-tox may be effectively applied by aircraft. Aerial applications may be made only to head lettuce and tomatoes. Refer to the specific crop and use under the Directions for Use section for the rate and timing of application. Mix the recommended amount of Alfa-tox in sufficient water to apply a minimum of 2 gals. of spray per acre.

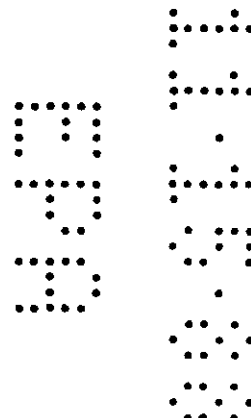
Observe the Precautionary Statements and all precautions on the label to avoid any effects to application personnel or crops. Flagmen and loaders should wash thoroughly after handling, before eating, and at the end of each day's operation.

Avoid application under conditions where uniform coverage cannot be obtained or where excessive spray drift may occur.

Do not blow spray lines or dump contents while in flight.

Chemigation

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



Directions for Use

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

Reentry Statement for Agricultural Uses

No user shall permit the application of this product in such a manner as to directly or indirectly expose workers or other persons except those knowingly involved in the application. The area being treated must be vacated by unprotected persons.

Do not enter treated areas without protective clothing until dusts have settled. Protective clothing includes at least a hat or other suitable head covering, a long-sleeved shirt and long-legged trousers or a coverall type garment (all of a closely woven fabric) covering the body including arms and legs, socks and shoes.

Because certain states may require more restrictive reentry intervals for various crops treated with this product, consult your State Department of Agriculture for further information.

Written or oral warnings must be given to workers who are expected to be in a treated area or in an area about to be treated with this product. Oral warnings must be given which inform workers of areas or fields that may not be entered without specific protective clothing until sprays have dried and appropriate actions to take as described under Precautionary Statements at the end of this label. When oral warnings are given, warnings shall be given in a language customarily understood by workers. Oral warnings must be given if there is reason to believe that written warnings cannot be understood by workers. Written warnings must include the following information: "CAUTION. Area treated with Alfa-tox on (date of application). Do not enter without appropriate protective clothing until sprays have dried. In case of accidental exposure, flush eyes with plenty of water, wash skin with plenty of soap and water. Call a physician if irritation persists. Remove and wash contaminated clothing before reuse."

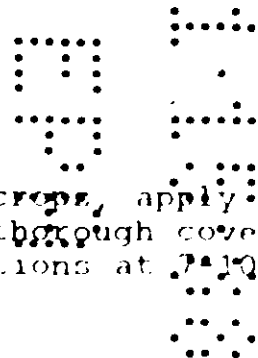
Forage Insects

Small Fruit Insects

For the control of the insects on the following crops, apply 2 1/2 qts. per 100 gals. of water per acre as a thorough cover spray when insects first appear. Repeat applications at 7-10 day intervals as infestations warrant.

Cranberries

Cranberry Fruitworms, Leafhoppers, Spittlebugs: Do not apply within 14 days of harvest.



Grapes

Flea Beetles, Grape Berry Moths, Grape Leafrollers, Grape Leaf Skeletonizers, Japanese Beetles, Leafhoppers, Pacific Mites, Rose Chafers: For Grape Berry Moths, apply as a postbloom cover spray and repeat 10 days later; make third and fourth applications at 10 day intervals if necessary.

Do not apply within 14 days of harvest.

Note: The California Department of Agriculture has set a 5-day reentry interval for Diazinon on grapes. Five days should elapse between the time of application and the time a worker may enter the field to engage in any activity requiring substantial contact with treated foliage. When a mixture of two or more organic phosphate pesticides is applied in combination, the interval should be prolonged by adding to the largest applicable interval an additional 50% of that interval.

Strawberries

Aphids, Flea Beetles, Spittlebugs, Strawberry Leaf Beetles, Strawberry Leafrollers, Strawberry Weevils, Twospotted Mites: Do not apply within 5 days of harvest.

Vegetable Insects

For control of the insects on the following crops, use 2 1/2 qts. per acre in sufficient water for thorough coverage. Begin treatment at first sign of insect infestation and repeat at 7-10 day intervals as infestation warrants.

Broccoli

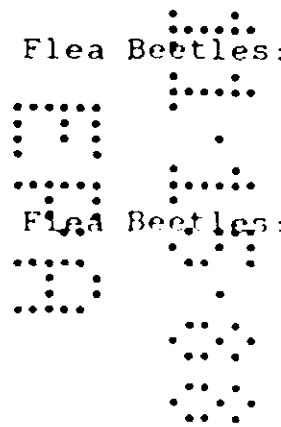
Aphids, Imported Cabbageworms, Diamondback Moths, Flea Beetles: Do not apply within 14 days of harvest.

Cabbage

Aphids, Imported Cabbageworms, Diamondback Moths, Flea Beetles: Do not apply within 7 days of harvest.

Cauliflower

Aphids, Imported Cabbageworms, Diamondback Moths, Flea Beetles: Do not apply within 7 days of harvest.



Carrots

Aphids, Leafhoppers: Do not apply within 10 days of harvest or 14 days if tops are used for food or feed.

Collards

Aphids, Corn Earworms, Diamondback Moths, Flea Beetles, Harlequin Cabbage Bugs, Imported Cabbageworms: Do not apply within 14 days of harvest.

Sweet Corn

Fall Armyworms, Flea Beetles, Grasshoppers, Japanese Beetles, Rose Chafers: Do not apply within 7 days of harvest.

Cucumbers

Aphids, Cucumber Beetles, Serpentine Leafminers, Thrips: Do not apply within 7 days of harvest.

Kale

Aphids, Corn Earworms, Diamondback Moths, Flea Beetles, Harlequin Cabbage Bugs: Do not apply within 14 days of harvest.

Lettuce

Aphids, Dipterous Leafminers, Leafhoppers: Do not apply within 14 days of harvest.

Melons (Cantaloupes, Muskmelons, and Watermelons)

Aphids, Cucumber Beetles, Leafhoppers, Melon Worms, Mites, Serpentine Leafminers, Thrips: Do not apply within 3 days of harvest.

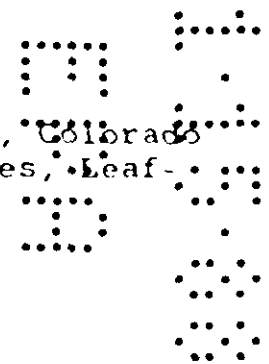
Peas (Succulent only)

Aphids, Pea Weevils: Do not apply within 7 days of harvest or grazing.

Potatoes

Aphids, Banded Cucumber Beetles, Blister Beetles, Colorado Potato Beetles, Dipterous Leafminers, Flea Beetles, Leafhoppers, Southern Armyworms.

Note: Do not apply within 35 days of harvest.



Radishes

Aphids, Dipterous Leafminers, Flea Beetles: Do not apply within 10 days of harvest.

Squash (Summer and Winter)

Aphids, Cucumber Beetles, Leafhoppers, Mites, Squash Vine Borers: Do not apply to winter squash within 3 days, or summer squash within 10 days, of harvest.

Tomatoes

Aphids, Blister Beetles, Dipterous Leafminers, Fall Armyworms, Flea Beetles, Japanese Beetles, Tomato Fruitworms: Do not apply within 1 day of harvest.

Turnips

Aphids, Dipterous Leafminers, Flea Beetles: Do not apply within 10 days of harvest or 14 days if tops are to be used as food or feed.

Foliage Insects

Roses, Other Flowers, Most Shade Trees and Ornamentals

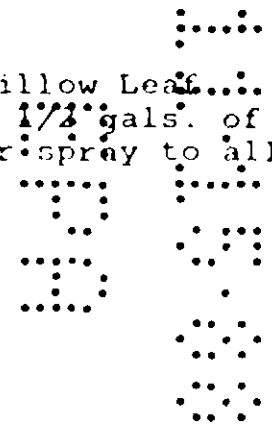
Japanese Beetle Adults, Leafhoppers, Mealybugs, Aphids, Mites: Apply 2 to 3 qts. (1 to 1 1/2 oz. per 1 1/2 gals. of water) per 100 gals. of water as a thorough cover spray to all plant surfaces when insects first appear. Repeat as necessary.

Andromeda, Azalea, Hawthorn, Oak, and Sycamore

Lacebug: Apply 2 to 3 qts. (1 to 1 1/2 oz. per 1 1/2 gals. of water) per 100 gals. of water as a thorough cover spray to all plant surfaces when small nymphs appear. Repeat as necessary.

Most Deciduous Shade Trees and Shrubs

Gypsy Moth, Tent Caterpillar, Elm Leaf Beetle, Willow Leaf Beetle: Apply 2 to 3 qts. (1 to 1 1/2 oz. per 1 1/2 gals. of water) per 100 gals. of water as a thorough cover spray to all plant surfaces when insects first appear.



Holly, Boxwood, and Birch

Leafminers: Apply 2 to 3 qts. (1 to 1 1/2 oz. per 1 1/2 gals. of water) per 100 gals. of water as a thorough cover spray to all plant surfaces in early to mid-May. Repeat in 10 days.

Many Ornamentals and Shade Trees

Oystershell Scale, Euonymus Scale, Pine Needle Scale, Juniper Scale: Apply 2 to 3 qts. (1 to 1 1/2 oz. per 1 1/2 gals. of water) per 100 gals. of water as a thorough cover spray to all plant surfaces when scale crawlers first appear.


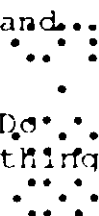
NOTE: If a mist blower is used, apply 2 gals. per 50 gals. of water as a general foliar spray on flowers, shade trees, and ornamentals for control of the listed pests. Consult manufacturer's directions for calibration and capacity recommendations making appropriate adjustments in accordance with these recommendations.

Storage and Disposal

Store at temperatures above 32°F. Do not contaminate water, food, or feed by storage or disposal. Open dumping is prohibited.

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

<u>Precautionary Statements</u>
<u>Hazards to Humans and Domestic Animals</u>
CAUTION	
<p>Causes eye irritation. Avoid contact with eyes, skin and clothing. Wash thoroughly with soap and water after handling. Harmful if swallowed, inhaled, or absorbed through skin. Avoid breathing vapors or spray mist. Do not contaminate food or feed. Remove contaminated clothing and wash before reuse.</p>	
Continued ...	

Statement of Practical Treatment

Since Alfa-tox is a combination of diazinon, an organophosphate, and methoxychlor, a chlorinated hydrocarbon, the symptoms of poisoning will be related to the toxicity of both ingredients.

If in eyes: Flush with plenty of water. Get medical attention if irritation develops or persists.

If on skin: Wash with plenty of soap and water. Get medical attention if irritation develops or persists.

If swallowed: DO NOT INDUCE VOMITING. Call a physician or poison control center immediately. Do not give anything by mouth to an unconscious person.

If inhaled: Remove victim to fresh air. Give artificial respiration, if necessary, to maintain breathing. (Do not give mouth-to-mouth resuscitation if exposure is due to swallowing). Get medical attention.

Note to Physician: Atropine is antidotal for organic phosphate poisoning and should be given intravenously in relatively large amounts, 2-4 mg ($1/30$ to $1/15$ grain) at 5 to 10 minute intervals until the patient is atropinized. 2-PAM may be given in severe cases. Give supportive therapy as needed. Lavage stomach if ingested. Solvent may present aspiration hazard.

Environmental Hazards

This product is toxic to fish and wildlife. Birds feeding on treated areas may be killed. Do not apply when weather conditions favor drift from areas treated. Do not contaminate any body of water by direct application, cleaning of equipment, or disposal of wastes and containers.

This pesticide is highly toxic to bees exposed to direct treatment or to residues remaining on the treated area. Do not apply when bees are actively visiting the crop, cover crop, or weeds blooming in the treatment area. Applications should be timed to provide the maximum possible interval between treatment and the next period of bee activity.

Physical or Chemical Hazards

Do not use, pour, spill, or store near heat or open flame.

Alfa-tox® trademark of CIBA-GEIGY

EPA Reg. No. 100-472
EPA Est.

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Agricultural Division
CIBA-GEIGY Corporation
P. O. Box 18300
Greensboro, North Carolina 27419

CGA 16L2S

June 30, 1982
Revised November 24, 1982
Revised August 6, 1986
Updated Storage & Disposal
Revised January 11, 1988
(chemigation, endangered species)

Revised September 12, 1988
End. spp., changed chem name, deleted xylene from active ingredients, deleted crops not supported under May 1, 1987, EPA Data Call-In. Added Farm Worker Safety Statements (PR Notice 83-2), deleted Pine use per Ground Water Data Call-In.

Revised November 11, 1988
Deleted aerial use - corn, changed chemical name back to original, added lbs., added "Do not use Alfa-tox on commercially grown potatoes which will be hand-harvested."

(LABELS-A.1 - ALFA-TOX/F2)

