

NOV 30 1988

Ms. Carolyn Bussey
Chemical Corporation
P.O. Box 18300
Greensboro, NC 27419

Subject: Amendments - Revise per May 1, 1987 Comprehensive DCI:
Limit aerial application only to field and sweet corn
for control of European corn borer, Fall armyworm,
and Southwestern corn borer;
Specify sweet corn for all other corn pest uses;
Delete Pinto beans, peanuts, sorghum, soybeans, sugarcane,
tobacco, alfalfa, clover, cowpeas, and lespedeza;
Specify succulent only for beans & peas;
Prohibit use on hand-harvested commercially grown potatoes;
Delete geographic restriction (NY) for Hy. erodes Weevil
D-2-n Diazinon 14G
EPA Reg. No. 100-469
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) A "Statement of Practical Treatment" must be added to the label. The Agency recommends the following text, however, if your toxicological data indicates otherwise, you may submit proposed revised text for Agency approval:

Statement of Practical Treatment

If swallowed, call a physician immediately. Drink one or two glasses of water and induce vomiting by touching the back of the throat with finger. Repeat until vomit fluid is clear. Do not induce vomiting or give anything by mouth if person is unconscious or convulsing.

If any person is in contact with the insecticide, apply artificial respiration if necessary.

If on skin, wash promptly with soap and water. Rinse thoroughly.

If in eyes, rinse eyes for at least 15 minutes with water and call a physician immediately.

Notes to Physician:

This product is an organophosphate insecticide. If symptoms of cholinesterase inhibition are present, atropine sulfate by injection is antidotal. 2-PAM is also antidotal and may be administered, but only in conjunction with atropine.

- 3) Your cover letter states that aerial application for field and sweet corn is intended for control of European corn borer, Fall armyworm, and Southwestern corn borer, however, on the label the second paragraph of the "Field and Sweet Corn" directions specify that aerial application pertains only to "the above use" (i.e., European corn borer). You have indicated in a recent telephone conversation that Ciba-Geigy intended that aerial application pertain to all three listed pests. Therefore, relocate the current second paragraph to appear instead after the Southwestern corn borer use directions paragraph, and change "the above use" to "the above uses".
- 4) In the directions for "Lawn Pest Control (excluding golf courses and sod farms)", revise "and brush lawn to work granules down to the soil surface" to read either "and water thoroughly to wash granules down to the soil surface" or "and water thoroughly after application". Brushing grass is typically used only as a golf course treatment for greens. This will also bring the directions into agreement with your revised avian precautions (advising watering in certain circumstances), and the proposed revisions (see item 4 below) regarding child and pet reentry on treated lawns (i.e., Keep children and pets off treated areas until this material is washed into the soil and the grass is dry).

[It is noted that your other granular use lawn products (EPA Reg. Nos. 100-468 and 100-528) specify watering thoroughly after application for a variety of pests, but do not include chinch bugs in the listings. Since chinch bug control usually requires placement of the pesticide in the thatch or at the soil line, you may wish to revise those other product labels to include chinch bugs in the pest listing for which watering should be done after application.]

- 5) In the "Storage and Disposal" text, "Storage" subsection, revise "away from foodstuffs" to "away from food or feed". You may choose to expand this prohibition to include any (or all) of the other items (i.e., seeds, fertilizers, herbicides, and other insecticides) that appear in the "Storage" section on your other granular product labels.

- 6) The heading "Precautionary Statements" and the subheading "Hazards to Humans & Domestic Animals" must be added to the label in the appropriate location, ahead of the signal word "CAUTION" and associated precautionary text that appears on page 2 of your submission.
- 7) Revise text of that "Hazards to Humans & Domestic Animals" section to read as follows:

Harmful if swallowed, inhaled, or absorbed through skin. Avoid breathing dust and contact with eyes, skin, or clothing. Wash thoroughly after handling and before smoking or eating. Do not store near food or feed products. Do not contaminate ornamental fish ponds. Keep children and pets off treated areas until this material is watered into the soil and the grass is dry.

- 8) Revise the subheading "Fish and Wildlife Caution" to "Environmental Hazards", and revise the text to read as follows:

This product is toxic to birds, fish, and wildlife including waterfowl. Birds including waterfowl feeding on treated areas may be killed. Do not apply directly to water or wetlands. Do not contaminate water by disposal of equipment washwaters. Apply this product only as specified on this label.

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)

For Agricultural or Commercial Use Only

D-z-n diazinon 14G

Granular Insecticide

For control of certain soil insects including wireworms, cutworms, and other crop pests.

This product must not be used on golf courses and sod farms.

50 Pounds
Net Weight

ACCEPTED
with COMMENT
in EPA REG. NO.

NOV 30 1988

100-469

Active Ingredient:

Diazinon: O,O-Diethyl O-(2-isopropyl-6-methyl-4-pyrimidin-yl) phosphorothioate 14.3%

Inert Ingredients: 85.7%

Total: 100.0%

EPA Reg. No. 100-469

D-z-n diazinon 14G is a granular insecticide

KEEP OUT OF REACH OF CHILDREN.

CAUTION

See additional precautionary statements on back of bag.

Control No. 06850

See directions for use on back of bag.

50 Pounds
Net Weight

CIBA-GEIGY

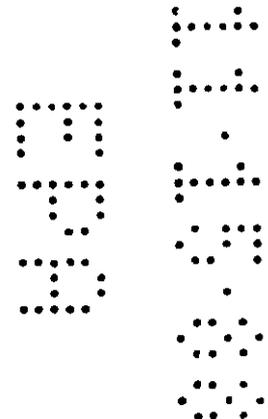
DIRECTIONS FOR USE AND CONDITIONS OF SALE AND WARRANTY

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.



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.

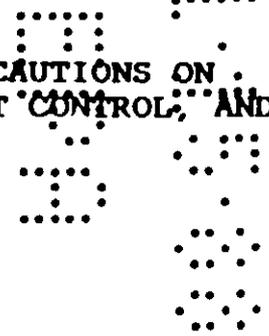
Because certain states may require more restrictive reentry intervals for various crops treated with this product, consult your State Department of Agriculture for further information.

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 dusts have settled and appropriate actions to take as described under Caution 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 Diazinon 14G on (date of application). Do not enter without appropriate protective clothing until dusts have settled. In case of accidental exposure, flush eyes or skin with plenty of water. Call a physician if irritation persists. Remove and wash contaminated clothing before reuse."

Applications to the soil should be worked into the top few inches immediately after application with a rotary hoe, cultivator, disk, harrow, or other suitable means for greatest effectiveness.

FAILURE TO FOLLOW ALL DIRECTIONS FOR USE AND PRECAUTIONS ON THIS LABEL MAY RESULT IN CROP INJURY, POOR INSECT CONTROL, AND/OR ILLEGAL RESIDUES.



Field and Forage Insects

Field or Sweet Corn

European Corn Borers: Apply 7-14 lbs. per acre over the corn so granules fall into whorls, when 75% of plants show first-generation borers feeding. Make a second application 7 days later if needed. To control second-generation corn borers, apply 7-14 lbs. per acre, as above, when field count shows 100 egg masses per 100 plants.

D·z·n diazinon 14G may be applied by aircraft for the above use. This material should be uniformly applied to the area to be treated at the recommended rates given above.

Fal Armyworms: Apply 7-14 lbs. per acre over the corn so granules fall into whorls when armyworms first appear. Repeat application if necessary.

Southwestern Corn Borers: Apply 7-14 lbs. per acre over the corn so granules fall into whorls when second-generation borers first appear. Repeat application one week later.

Note: Do not feed treated fodder to dairy or beef cattle or sheep for 10 days following application. Corn may be picked immediately. Temporary spotting of foliage sometimes occurs following application.

Sugar Beets

Sugar Beet Root Maggots: Apply 7-14 lbs. per acre in a 5-7 inch band (based on row width of 22 in.) or 4.7-9.4 oz. per 1,000 linear feet of row in a 5-7 inch band either incorporated 2-3 inches at planting or applied above the seed after the seed is covered. Apply ahead of the press wheel. If a heavy maggot infestation is anticipated or a wet spring occurs, a second application may be made, early postemergence, when the adult maggots (flies) first start to appear. If a second application is necessary, apply 7-10 1/2 lbs. per acre in a 5-7 inch band (based on row width of 22 in.) or 4.7-7.1 oz. per 1,000 linear feet of row in a 5-7 inch band directly over the row.

Note: D·z·n diazinon 14G should not come in direct contact with the seed or injury will occur.

Wireworms: Broadcast 21-28 lbs. per acre just prior to planting. Work into soil 4-8 inches.

Vegetable Crop Insects

Broccoli, Brussels Sprouts, Cabbage, and Cauliflower

Root Maggots: Broadcast 14-21 lbs. per acre before planting or transplanting. Work into soil 3-4 inches.

Onions

Onion Maggots: Apply 14-28 lbs. per acre as broadcast soil treatment just prior to planting. Thoroughly mix the chemical into the top 3-4 inches of soil by disking, harrowing, or other suitable means.

Radishes

Root Maggots: Apply 10 1/2-14 lbs. per acre (2 1/2-2 4/5 oz. per 1,000 linear feet of row) in the seed furrow at planting time.

Sweet Corn

Corn Rootworm Larvae: (Postemergence Basal Treatment)

Apply 4 1/2-8 1/2 oz. per 1,000 linear feet of row in a band over the row at first sign of rootworms, but not later than June 24 in the Middle Corn Belt or July 1 in the Northern Corn Belt. Cover treated band with 2-3 inches of soil.

Apply amount per acre recommended according to row spacing chart for basal treatment.

Lesser Cornstalk Borers: Apply 8 1/2-17 oz. per 1,000 linear feet of row in a 10-inch band centered over the row. Make application at planting time or when crop begins to emerge. Cover the treated band with 1-2 inches of soil.

Apply amount per acre recommended according to row spacing chart for basal treatment.

Suggested Rates According to Corn Row Spacing

Row spacing	Linear feet of corn row per acre	Amount of D·z·n diazinon 14G Per Acre Postemergence basal treatment	
48"	10,890	3-6 lbs.
42"	12,455	3 1/4-6 1/2 lbs.
40"	13,068	3 1/2-7 lbs.
38"	13,939	3 3/4-7 1/2 lbs.

36"	14,520	4-8 lbs.
30"	17,424	4 3/4-9 1/2 lbs.
24"	21,790	5 3/4-11 1/2 lbs.
20"	26,136	7-14 lbs.
15"	34,848	9 1/4-18 1/2 lbs.

Note: For row spacings not listed, calculate the appropriate dosage rates based on the 40-in. row figures.

European Corn Borers: See Corn under Field and Forage Insects.

Cutworms: Broadcast 14-28 lbs. per acre. For surface cutworms apply just prior to planting or when larvae first appear and work into soil 1-2 inches. Do not apply after layby. For subterranean cutworms, apply just prior to planting and work into soil 3-6 inches.

Seed Corn Maggots: Broadcast 14-28 lbs. per acre just prior to planting. Work into soil 2 inches.

Garden Symphylans (Centipedes): Broadcast 70 lbs. per acre just prior to planting and work into soil 4-8 inches. This preplant treatment will also control other soil insects such as cutworms (surface and subterranean) and wireworms.

Wireworms: Broadcast 21-28 lbs. per acre before planting. Work into soil 4-6 inches.

Note: Do not feed treated fodder to dairy or beef cattle or sheep for 10 days following application. Corn may be picked immediately.

Tomatoes

Vinegar Flies (Drosophila spp.): Broadcast 7 lbs. per acre when flies first appear. Repeat in 7-10 day intervals or as required.

Other Vegetable Insects

Cutworms (Surface and Subterranean)

Broccoli	Endive (escarole)	Pole Beans (succulent only)
Brussels Sprouts	Kale	Snap Beans (succulent only)
Cabbage	Lettuce	Spinach
Cantaloupes	Lima Beans (succulent only)	Summer Squash
Cauliflower	Muskmelons	Swiss Chard
Celery	Parsley	Tomatoes
Collards	Peas (succulent only)	Watermelons
Cucumbers	Peppers	Winter Squash

Broadcast 14-28 lbs. per acre just prior to planting. Work into soil 2-3 inches to control surface cutworms, 3-6 inches to control subterranean cutworms.

Potatoes: Broadcast 14-28 lbs. per acre before planting. Work into soil 4-6 inches.

Note: Do not use on commercially grown potatoes which will be hand-harvested.

Garden Symphylans (Centipedes)

Cabbage	Pole Beans (succulent only)	Tomatoes
Carrots	Radishes	Turnips
Lettuce	Red Beets	
Peas (succulent only)	Snap Beans (succulent only)	

Broadcast 1.6 lbs. per 1,000 square feet just prior to planting. Work into soil 4-8 inches. This preplant treatment will also control other soil insects such as cutworms (surface and subterranean), mole crickets, root maggots, and wireworms.

Mole Crickets

Broccoli	Endive (escarole)	Radishes
Brussels Sprouts	Kale	Tomatoes
Cabbage	Lettuce	Turnips
Cauliflower	Mustard	
Collards	Peppers	

Apply 7 lbs. per acre when insects are present. Make application to plant beds or fields 1-2 days prior to sowing of seed or transplanting and work into soil 1-2 inches.

Lesser Cornstalk Borers

Beans (Lima, Pole, Snap): Apply 7-14 lbs. per acre in a 6-inch band centered over the row. Apply when plants are 1/2-1 inch tall.

Wireworms

Broccoli	Endive (escarole)	Pole Beans (succulent only)
Brussels Sprouts	Kale	Snap Beans (succulent only)
Cabbage	Lettuce	Spinach
Cantaloupes	Lima Beans (succulent only)	Summer Squash
Carrots	Muskmelons	Sweet Potatoes
Cauliflower	Onions	Swiss Chard
Celery	Parsley	Tomatoes
Collards	Peas (succulent only)	Watermelons
Cucumbers	Peppers	Winter Squash

Broadcast 21-28 lbs. per acre just prior to planting. Work into soil 4-8 inches.

Potatoes: Broadcast 21-42 lbs. per acre before planting. Work into soil 4-8 inches or apply 7-21 lbs. per acre at planting, placing 1-2 lb. granules in bands 3-6 inches deep along both sides of row.

Note: Do not use on commercially grown potatoes which will be hand-harvested.

Sweet Potatoes (Southeastern U.S.): Broadcast 21 lbs. per acre over the tops of vines when roots begin to enlarge.

Lawn Pest Control (excluding golf courses and sod farms)

Lawn Chinch Bugs: Apply 0.3-0.6 lb. (5-10 oz.) per 1,000 sq. ft. (1.5-3.0 lbs. per 5,000 sq. ft.) and brush lawn to work granules down to the soil surface. Repeat application in 7-10 days if necessary. For longer residual control and on dense growing lawns such as St. Augustine grass, use the higher rate.

Billbugs; White Grubs such as Japanese Beetle Larvae, European Chafer, and Southern Chafer: Apply 0.6 lb. (10 oz.) per 1,000 sq. ft. of lawn. For grub control make application any time between late July and early October. For billbug control apply when activity is first observed or when chewed or brown grass is present, indicating damage from this insect.

Hyperodes Weevil: Apply 0.6 lb. (10 oz.) per 1,000 sq. ft. of grass. Treat problem areas in mid-April and again in mid-May.

Precautions: Birds, especially waterfowl, feeding or drinking on treated areas may be killed. Apply this product only as specified on this label. Because of the migratory habits of certain waterfowl, do not apply in Nassau County, New York between November 1 and May 20. Do not exceed maximum permitted label rates, since rates above those recommended significantly increase potential hazards to birds. Avoid overlapping treated areas. If waterfowl, i.e., ducks, geese can be expected to enter the treated area after treatment (except spot treatments), water lawn with at least 0.25 inch water immediately after application, however stop watering before puddling occurs.

Storage and Disposal

Do not contaminate water, food, or feed by storage or disposal. Store in a cool, dry, well-ventilated area away from foodstuffs.

Pesticide: Pesticide or equipment rinsate that cannot be used according to label instructions may be disposed of on site or at an approved waste disposal facility.

Container: Completely empty bag by shaking and tapping sides and bottom to loosen clinging particles into application equipment. Then dispose of empty bag in a sanitary landfill or incinerate, or burn if allowed by state and local authorities. Stay out of smoke during burning. Do not reuse container.

For minor spills, leaks, etc., follow all precautions indicated on this label and clean up immediately. Take special care to avoid contamination of equipment and facilities during cleanup and disposal of wastes. In the event of a major spill, fire or other emergency, call (919) 292-7100 day or night.

Caution

Keep out of reach of children.

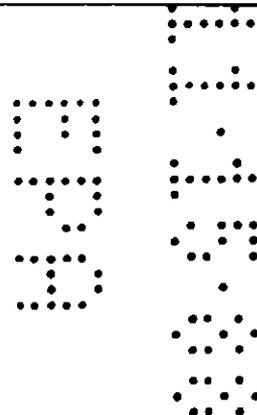
Harmful if swallowed. Avoid contamination of food and feed. Do not store near food or feed products. Avoid inhalation of dust. Avoid contact with skin, eyes, and clothing. Wash thoroughly after handling. May be absorbed through skin.

Fish and Wildlife Caution:

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

Keep out of lakes, streams, ponds, tidal marshes and estuaries (except for effluence from treated watercross beds). Do not apply to water that will be used for recreational purposes and human livestock consumption. Shrimp and crab may be killed at application rates recommended on this label. Do not apply where fish, shrimp, crab, and other aquatic life are important resources.

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.



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Agricultural Division
CIBA-GEIGY Corporation
Greensboro, North Carolina 27419

CGA 1L60Z

(LABELS-D.4 - DZN14G/DRAFT.1)

Revised - April 26, 1988
Deleted golf courses and
sod farms, added do not
use on golf courses and
sod farms to front
panel, deleted End.
spp., revised Env.
Hazards to delete golf
course/sod farm re-
strictions.

Revised - Sept. 12, 1988
Crops not supported
under May 1, 1987 EPA
Data Call-In, added
spill statement, changed
chemical name.

Revised Nov. 11, 1988
Changed chemical name
back to original, speci-
fied sweet corn for all
dfa's except European
corn borer control,
specified aerial
application for field
corn only. Added "Do not
use on commercially grown
potatoes which will be
hand-harvested.

