

267929

JUL 25 1990

Mr. Russell Sawyer  
Riverdale Chemical Company  
220 East 17th Street  
Chicago Heights, IL 60411

Subject: Amendment: Revise per Diazinon Registration Standard  
and the Agency's May 1, 1990 Data Call-In letter  
to reflect only those uses supported by Ciba-Geigy  
Riverdale 5% Diazinon Insect Killer Granules  
EPA Reg. No. 228-177  
Your submission received January 23, 1990

Dear Mr. Sawyer:

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

- 1) The front panel claims must be in accord with data supported use patterns. Ciba-Geigy is not supporting in-furrow application of granular diazinon products to food crops. Therefore, delete "root maggot" which are only associated with in-furrow application to radishes. Also, delete the pest claim for "onion maggot", unless the directions are revised to indicate pre-plant soil incorporation (see item " ", below).
- 2) In the Hazards to Humans and Domestic Animals, add "Do not contaminate ornamental fish ponds."
- 3) Revise the "Statement of Practical Treatment" and the associated "Note to Physician" to read as follows:  
  
If swallowed - Call physician or Poison Control Center immediately.  
Drink one or two glasses of water and induce vomiting by touching back of 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 inhaled - Remove victim to fresh air and apply artificial respiration if necessary.

2068

If on skin - Wash promptly with plenty of soap and water. Rinse thoroughly.

If in eyes - Rinse eyes with plenty of water and call a physician immediately.

NOTE 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.

4) Revise the Environmental Hazards text to read as follows:

This pesticide is highly toxic to birds, fish, and other wildlife. Birds, especially waterfowl, feeding or drinking on treated areas may be killed. Because of the migratory habits of certain Atlantic Coast waterfowl, do not apply this product to lawns in Nassau County, New York, between November 1 and May 20. Do not exceed maximum permitted label rates. Application rates above those recommended significantly increase potential hazards to birds and waterfowl. Avoid overlapping granules. Where irrigation (watering) is recommended in the directions, or if waterfowl, i.e., ducks or geese, can be expected in the treated area after treatment (except spot treatment), apply a minimum of 1/4 inch of water immediately after applying this product. Stop irrigation before puddling occurs. Keep out of lakes, streams, ponds, tidal marshes, and estuaries. Do not apply directly to water or wetlands (swamps, bogs, marshes, and potholes). Runoff may be hazardous to aquatic organisms in neighboring areas. 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. Do not contaminate water by cleaning of equipment or disposal of equipment washwaters.

5) Based on field studies, Ciba-Geigy is supporting only one application rate for lawns regardless of the type of lawn or type of pest. For this product, that rate is 2 pounds per 1000 sq. ft., which is the basic rate given on your label. No higher rate should appear. Therefore, under the heading "How to Apply", either delete "For most insects," from the directions to apply 2 pounds per 1000 square feet, or revise to indicate "For all the insects listed above,". Delete "For heavy lawns such as St. Augustine Grass, application should be increased to 3.0 pounds per 1000 sq. ft.". Likewise, either revise the rate for billbug and white grub control to 2 lbs. per 1000 sq. ft., or delete this sentence entirely, since those pests are now included under the basic (2 lb.) application rate.

6) For the reason given in item "5" above, delete the headings and associated columns "St. Augustine Lawn 3 lbs." and "White Grubs, Billbugs 2 1/2 lbs." from the spreader setting table. Revise the table heading to "LAWN SPREADER SETTING NO. (To deliver 2 lbs./1000 sq. ft.)". Delete "2 lbs." from the column heading "Grass or Dichondra Lawn", since there is only

3069

one acceptable rate and that will now appear in the revised table heading. Update the model number for the Scott drop spreader to "Scott Precision Flow Drop Spreader, model PF4". Finally, relocate this revised (and much narrower) spreader setting table up into the lawn use directions, to appear directly after the directions for Hyperodes weevil control (i.e., just before the overall lawn use directions change over to spot treatment directions). Once relocated you may delete "Insects listed below" from the table, as well as the listing of insect pests, since these same pests are already listed at the beginning of the overall lawn use directions.

- 6) Under the heading "GARDEN INSECT CONTROL", delete ", except where applied in seed furrow", since such use is not supported and should not appear on the label.
- 7) In the directions for control of mole crickets, delete the crop "strawberries" since this is not a supported use for granular diazinon. Also, revise the application rate to 3 1/2 oz. per 500 sq. ft.
- 8) For beans (including lima beans, pole beans, and snap beans) and peas, use is now limited to succulent varieties only. It is noted that you have added a symbol before "peas" which refers to a footnote at the end of the label, but have not done likewise for the various types of beans. The "peas" footnote is quite far removed from the text and is likely to be overlooked by the consumer. It would be preferable to add a couple of sentences to the general paragraph under the heading GARDEN INSECT CONTROL, such as "For beans and peas, use on succulent varieties only. Do not use on dried bean varieties such as pintos, dried limas, navy beans, etc., or on dried pea varieties such as blackeyed peas.". This same label section would also be the preferred location to add the required statement "Do not use on commercially-grown potatoes which will be hand-harvested.".
- 9) Delete the crop "carrots" and the associated in-furrow directions to control carrot rust flies. As noted above, in-furrow application of diazinon is not a supported use pattern.
- 10) Delete the directions for in-furrow application to onions for onion maggot control. You may revise the directions for this pest to read: "Broadcast just before planting and mix into the top 3-4 inches of soil. Note: Diazinon may not control organophosphate-resistant onion maggots.".
- 11) Delete the separate crop name "Radishes" and the associated in-furrow directions for control of root maggots.
- 12) Based on the results of avian field studies, Ciba-Geigy is not supporting band application or post-emergence application of granular diazinon to corn. Delete the pest claims and associated directions for control of corn rootworms, European corn borers, Fall armyworms, and Southwestern corn borers on sweet corn.

13) Delete the directions for control of vinegar flies (Drosophila) on tomatoes. Ciba-Geigy is not supporting this foliar application use.

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 under the amended labeling.

Please refer to the Diazinon Registration Standard, as amended, for release for shipment and channels of trade dates for diazinon products bearing appropriately amended labels.

Sincerely yours,

George T. LaPocca  
Product Manager (15)  
Insecticide-Fungicide Branch  
Registration Division (#7505C)

**Riverdale**

508

# 5% Diazinon Insect Killer Granules

## Ready To Use

ACCEPTED  
with COMMENTS  
in EPA Letter Dated:

JUL 25 1990

For use on lawns, gardens,  
ornamentals and around the home

Under the Federal Insecticide,  
Fungicide, and Rodenticide Act as  
amended, for the pesticide  
registered under EPA Reg. No.  
228-177

### TREATS UP TO 20,000 SQ. FT.\*

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

This product is designed especially for outdoor control of ants and other listed crawling insects. It is effective as a preplant treatment for control of cutworms and wireworms in vegetable gardens. It also controls a wide range of insects in garden plantings and around the home, and offers excellent protection against major lawn insects in both grass and dichondra lawns.

Kills ants, brown dog ticks, crickets, cutworms, earwigs, grubs, millipedes, onion maggots, root maggots, sowbugs, wireworms and other listed insects.

\*See Directions For Use for specific recommendations

**ACTIVE INGREDIENT:**

Diazinon [0,0-Diethyl 0-(2-isopropyl-6-methyl-4-pyrimidinyl) phosphorothioate] ..... 5%

**INERT INGREDIENTS:** ..... 95%

**TOTAL** ..... 100%

KEEP OUT OF REACH OF CHILDREN

**CAUTION**

See additional precautionary statements on back panel

EPA REG. NO. 228-177

## NET WT. 20 LBS.

EPA EST. NO. 228-IL-1

## PRECAUTIONARY STATEMENTS

### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

#### CAUTION

Harmful if swallowed, inhaled, or absorbed through the skin. Avoid breathing dust and contact with eyes, skin and clothing. May cause contact sensitization following repeated contact with skin in susceptible individuals. Avoid repeated contact with skin. If sensitization reactions result consult a physician. Do not allow children or pets on treated areas until granules have been watered into the soil and the grass or soil has dried. Wash thoroughly after handling and before smoking or eating.

#### STATEMENT OF PRACTICAL TREATMENT

**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 the throat with a finger. Do not induce vomiting or give anything by mouth to an unconscious person.

**IF INHALED:** Move victim to fresh air. Apply respiration if necessary.

**IF ON SKIN:** Wash thoroughly with soap and water.

**IF IN EYES:** Flush eyes with plenty of water. If irritation persists get medical attention.

**NOTE TO PHYSICIAN:** If symptoms of cholinesterase inhibition occur, administer atropine therapeutically.

#### ENVIRONMENTAL HAZARDS

This pesticide is highly toxic to fish and wildlife. Birds feeding in treated areas may be killed. Do not apply directly to water or wetlands (swamps, bogs, marshes, and potholes). Runoff maybe hazardous to aquatic organisms in neighboring areas. Collect or incorporate granules that are spilled during loading or are visible on soil surface in turn areas. Do not contaminate water when disposing of equipment washwaters.

Because of the migratory habit of certain Atlantic Coast waterfowl, do not apply this product in Nassau County, New York between November 1 and May 20. Do not exceed maximum permitted label rates. Rates above those recommended significantly increase potential hazards to birds and waterfowl. Avoid overlapping of granules. Keep out of lakes, streams, ponds, tidal marshes and estuaries (except for effluence from treated watercress beds). 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.

**DIRECTIONS FOR USE**

It is a violation of Federal Law to use this product in a manner inconsistent with the labeling.

**LAWN PROTECTION:** 5% DIAZINON INSECT KILLER GRANULES controls the following lawn pests in both grass and dichondra lawns:

Ants	Crickets	Sod Webworms (Lawn Moths)
Armyworms	Cutworms	Sowbugs
Bermudagrass Mites	Earwigs	Springtails
Billbugs	Fleas	White Grubs of:
Brown Dog Ticks	Leafhoppers	Japanese Beetle
Chiggers	Millipedes	European Choler
Chinch Bugs		Southern Choler
Clover Mites		

**How to Apply:**  
Apply 5% DIAZINON INSECT KILLER GRANULES with a fertilizer spreader. See spreader setting on chart below.

For most insects, apply at a rate of 2 lbs per 1000 sq. ft. (20' x 50').  
For heavy lawns, such as St. Augustine grass, the rate should be increased to 3 lbs. per 1000 sq. ft.  
For billbug and white grub control, the rate is 2½ lbs per 1000 sq. ft.  
For best results, the lawn should be dry before application. To control surface feeding insects, armyworms and sod webworms (lawn moths), water lawn lightly after application. To control ants, billbugs, chinch bugs, cutworms, and white grubs, water lawn thoroughly after application.

**When to Apply:**  
Apply when insects are present.

To control ants, armyworms, Bermudagrass mites, chinch bugs, cutworms, leafhoppers, and sod webworms (lawn moths), apply at 4-6 weeks intervals.

To control white grubs, apply any time between July and early October. To control billbugs, apply when activity is first observed, or when chewed or brown grass indicates damage from these insects. Repeat as necessary.

To control Hyperodes weevils (New York only):  
Apply 1½ oz. per 1000 sq. ft. of grass. Water grass thoroughly after application. Treat problem areas in mid-May and again in mid-July.

**Spot Treatment:**  
Ants: Apply 1½ teaspoons over and around each ant hill.

**Imported Fire Ants:** To aid in the control of fire ants in lawns and other recreational areas, apply ½ cup over, and 2 ft. around, each fire ant mound. Immediately after application, water in thoroughly. A minimum of 1 gallon of water should be applied to each mound area. Repeat as necessary. Apply gently to avoid disturbing ants. Use of high pressure watering equipment may disturb ants and cause migration, reducing product effectiveness. Note: For best results, apply in cool weather, 65-80°F. or in early morning or late evening hours. Treat new mounds as they appear.  
**Chigger Wasps:** Apply 1½ teaspoon: in and around each nest opening. Apply at dusk when wasps are not active.

**BAND TREATMENT AROUND HOUSE FOUNDATION:**

The following pests are commonly found around or near foundations of houses as well as in lawns. Certain of these pests may enter houses

Ants	Crickets	Millipedes
Brown Dog Ticks	Earwigs	Sowbugs (Pillbugs)
Clover Mites	Fleas	Springtails (Collembola)

**How to Apply:**  
Apply a 5-foot band of 5% DIAZINON INSECT KILLER GRANULES next to the house foundation. Distribute granules uniformly, using a rate of 3-2 oz. for each 100 sq. ft. area (5' x 20') treated.

**When to Apply:**  
Apply when insects are present, especially in late spring or early fall. Repeat as necessary.

**GARDEN INSECT CONTROL:**

5% DIAZINON INSECT KILLER GRANULES controls certain garden insects on crops listed below. Apply just prior to planting and immediately mix thoroughly into soil to the specified depth, except where applied in seed furrow.

Corn (surface and subterranean)	Endive (Escarole)	Potatoes
Broccoli	Kale	Snap Beans
Brussels Sprouts	Lettuce	Spinach
Cabbage	Lima Beans	Summer Squash
Cantaloupes	Muskmelons	Swiss Chard
Cauliflower	Parsley	Tomatoes
Celery	Peas	Watermelons
Collards	Peppers	Winter Squash
Cucumbers	Pole Beans	

**NOTE:** The spreader settings listed below are approximate. Accurately weigh a few pounds into your spreader and apply to a measured area. Then adjust spreader setting if necessary in order to assure correct rate of application.

Apply 2 to 4 oz. per 500 sq. ft. and mix into soil to a depth of 2-3 inches for surface cutworms and 3-6 inches for subterranean cutworms. For potatoes, mix into soil 4-8 inches deep.

Broccoli	Endive (Escarole)	Peppers
Brussels Sprouts	Kale	Radishes
Cabbage	Lettuce	Strawberries
Cauliflower	Mustard	Tomatoes
Calliopsis		Turnips

Apply 4 oz. per 500 sq. ft. and mix into soil to a depth of 1-2 inches

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

Apply 7 to 14 oz. per 500 sq. ft. and mix into soil to a depth of 4-8 inches.

Broccoli, Cabbage, Cauliflower  
Root Maggots: Apply 7 to 11 oz. per 500 sq. ft. over entire seedbed before planting or transplanting and mix into soil to a depth of 3-4 inches.

Carrots  
Carrot Rust Flies: Apply 7 oz. per 500 sq. ft. in seed furrow at planting time.

Onions  
Onion Maggots: Apply 4 oz. per 500 sq. ft. in seed furrow at planting time.

Radishes  
Root Maggots: Sprinkle lightly at the rate of 3-4 oz. per 500 linear feet of row in seed furrow at planting time.

Sweet Corn  
Corn Rootworms: Apply 4-7 oz. per 500 sq. ft. in a band over the row at planting time.

Cutworms: Apply 7-11 oz. per 500 sq. ft. Mix into soil to a depth of 1-2 inches for surface cutworms and 3-6 inches for subterranean cutworms.

European Corn Borers: Apply 4-7 oz. per 500 sq. ft. over corn so granules fall into whorls when 75% of the plants show first generation larvae feeding, and again 7 days later, if needed. Treat for second-generation when there is an average of 1 egg mass per plant.

Fall Armyworms: Apply 4-7 oz. per 500 sq. ft. over corn so granules fall into whorls when larvae first appear, and again for control of second-generation armyworms, if necessary.

Wireworms: Apply 7-15 oz. per 500 sq. ft. in a broadcast application. Mix into soil to a depth of 4-8 inches.

Southwestern Corn Borers: Apply 4-7 oz. per 500 sq. ft. over corn so granules fall into whorls when second-generation larvae first appear. Repeat application on week later.

\*NOTE: Corn may be picked immediately following last application. Do not feed fodder to livestock for ten days following last application.

Sweet Potatoes (Southeastern U.S.)  
Wireworms: Apply 11 oz. per 500 sq. ft. over the top of sweet potato plant foliage when roots begin to enlarge.

Tomatoes  
Vinegar Flies (Drosophila spp.): Apply 4 oz. per 500 sq. ft. over top of plants when flies first appear. Repeat at 7-10 day intervals, or as required. Tomatoes may be picked the same day.

Turnips  
Root Maggots: Apply 4 oz. per 500 sq. ft. in seed furrow at planting time.

**SPREADER SETTING**  
(per 1000 sq. ft.)

Spreader Make and Model	Insects listed below*		
	Grass or Dichondra Lawn	St. Augustine Lawn	White Grubs
Central Imperial Mark No. 1662-G	6½	7¼	7
Central Suburban Lawn Spreader No. 1622-0	6½	7½	7
Fert-Lome DeLuxe	6½	7¼	7
Fert-Lome Cyclone/Broadcast	4½	5	4½
Cyclone Model B 1 Rotary	4½	5	4½
Greenfield Model 105	6½	7¼	6¾
Ortho Drop Spreader Model 3000	4½	5½	5
Ortho Broadcast Spreader Model 4000	4½	7	6
J.C. Penney Model 8005	7¼	8	7½
J.C. Penney Rotary Spreader	5	7	6
Scott Model 33	4	5	4½
Sears Craftsman Model 671.19198	6	7	6½

\* Ants, Armyworms, Bermudagrass Mites, Brown Dog Ticks, Chiggers, Chinch Bugs, Clover Mites, Crickets, Cutworms, Earwigs, Fleas, Hyperodes Weevil (New York only), Imported Fire Ants, Lawn Moths (Sod Webworms), Leafhoppers, Millipedes, Sowbugs, Springtails (Collembola)

### STORAGE AND DISPOSAL

**STORAGE:** Store in original container and keep any bags containing unused product in an area inaccessible to children and domestic animals. Do not store near feed or foodstuff. To prevent cross-contamination, do not store near other fertilizers, or near herbicides, insecticides, fungicides or seeds.

**PRODUCT DISPOSAL:** To dispose of bags which contain unused product, securely wrap bag in several layers of newspaper and discard in trash.

**CONTAINER DISPOSAL:** Do not reuse empty bag. Fold empty bag and discard in trash.

**NOTICE:** Seller warrants that the product conforms to its chemical description and is reasonably fit for the purposes stated on the label when used in accordance with directions under normal conditions of use, but neither this warranty nor any other warranty of merchantability or fitness for a particular purpose, expressed or implied, extends to the use of this product contrary to label instructions, or under abnormal conditions, or under conditions not reasonably foreseeable to seller, and buyer assumes the risk of any such use.

<sup>†</sup>Peas: succulent only. Do not use on dried pea varieties such as dried blackeyed peas.