

AUG - 6 1990

Ms. Barbara Kairies
Chem-Tox, Inc.
21N 988 Pepper Road
Barrington, IL 60010

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
Chem-Tox Diazinon 4F
EPA Reg. No. 45385-33
Your submission dated May 29, 1990

Dear Ms. Kairies:

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

- 1) The Notice of Intent to Cancel use of diazinon on golf courses and sod farms stipulated that the prohibition "This product must not be used on golf courses and sod farms" must appear at the top of the label. Interpreting "top" as within the top half of the label, the prohibition should be relocated higher on the label, preferably under the word "Insecticide" (which is not part of this product's name, but which could be moved upward to make room for the required prohibition), or under the "For control of ..." paragraph. The prohibition should appear as a separate paragraph, and should not be incorporated into the use recommendations paragraph ("For control of ...") currently appearing at that location.

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 label. NOTE: When preparing your label, do not print the quotation marks that appear around revised text items specified in this letter.

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. LaRocca
Product Manager (15)
Insecticide-Rodenticide Branch
Registration Division (H7505C)

AUG - 8 1990

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

45385-33

CHEM-TOX

diazinon 4E

INSECTICIDE

For control of household pests, pests in food and feed handling establishments, pests on home lawns and pests of ornamentals outside the home as specified in label directions.

Recommended for commercial/industrial use only

KEEP OUT OF REACH OF CHILDREN. WARNING

Statement of Practical Treatment

If swallowed, call a physician immediately
**DO NOT INDUCE VOMITING UNLESS
NO OTHER TREATMENT IS AVAILABLE**
Vomiting may cause aspiration pneumonia as product contains petroleum distillates. If it is necessary to induce vomiting, give victim one or two glasses of water and insert finger in back of throat. 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 indicated.

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

If in eyes, rinse eyes with plenty of water and call a physician immediately.

Note to Physician: Solvent may present aspiration hazard. Gastric lavage may be indicated if product was taken internally. Diazinon is an organophosphate insecticide. If symptoms of cholinergic inhibition are present, atropine sulfate by injection is antidotal. 2-PAM is also antidotal and may be administered but only in conjunction with atropine.

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

Active Ingredient: Diazinon [O,O-Diethyl O-(2-isopropyl-6-methyl-4-pyrimidinyl) phosphorothioate] 47.5%

Inert Ingredients* 52.5%

Total 100.0%

* Contains xylene range aromatic solvent

EPA Reg.No.45385-33 / EPA Est.No.45385-IL-01

diazinon 4E contains 4 lbs. of diazinon per gallon

See directions for use on panel at right

One Gallon
U. S. Standard Measure

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. If terms are not acceptable, return the unopened product container at once.

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 Chem-Tox or the Seller. All such risks shall be assumed by the Buyer.

Chem-Tox 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. Chem-Tox makes no other express or implied warranty of Fitness or Merchantability or any other express or implied warranty. In no case shall Chem-Tox or the Seller be liable for consequential, special, or indirect damages resulting from the use or handling of this product. Chem-Tox 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 Chem-Tox.

Precautionary Statements

Hazards to Humans and Domestic Animals

WARNING

May be fatal if swallowed. May be absorbed through skin. Do not breathe spray mist. Do not get on skin or on clothing. Causes substantial but temporary eye damage. Do not get into eyes. Wear goggles or safety glasses when mixing or handling the concentrate. Wash thoroughly after handling and before smoking or eating. May cause contact sensitization following repeated contact with the skin of susceptible individuals. Avoid repeated contact with skin. If sensitization reactions result, consult a physician. Avoid contamination of food and feed. Food utensils such as tablespoons or measuring cups must not be used for food purposes after use in measuring pesticides. Keep out of reach of domestic animals. Do not use on humans, household pets, or livestock. Do not permit children or pets to go onto treated areas until spray has dried. Do not contaminate ornamental fish ponds.

Statement of Practical Treatment

If swallowed, call a physician immediately. **DO NOT INDUCE VOMITING UNLESS NO OTHER TREATMENT IS AVAILABLE.** Vomiting may cause aspiration pneumonia as product contains petroleum distillates. If it is necessary to induce vomiting, give victim one or two glasses of water and insert finger in back of throat. 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 indicated.

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

If in eyes, rinse eyes with plenty of water and call a physician immediately.

Note to Physician: Solvent may present aspiration hazard. Gastric lavage may be indicated if product was taken internally. Diazinon 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.

Environmental Hazards

This product is highly toxic to birds, fish and wildlife including waterfowl. Birds and 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. Rates above those recommended significantly increase potential hazards to birds and waterfowl. Avoid overlapping of sprays. If waterfowl, e.g., ducks and geese can be expected in the treated area after treatment (except spot treatment) water lawn with at least 1/4 inch of water immediately after spraying this product. Stop irrigation before puddling occurs. Keep out of lakes, streams, ponds, tidal marshes and estuaries. Do not apply directly to water. 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 residues on blooming plants. Do not apply this pesticide or allow it to drift to blooming plants if bees are visiting the treatment area.

Physical or Chemical Hazards

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

DIRECTIONS FOR USE

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

General Information

Diazinon 4E is an emulsifiable concentrate and is intended for use by pest control operators. Apply the product after dilution with water according to the directions for use for the control of those pests specified on this label. Diazinon 4E is not intended for use in preparing oil base sprays.

This product may be used indoors in households, apartments, and other structures including schools (except classrooms in use), hospitals (except in patient rooms while occupied), office buildings, museums, libraries, sports facilities, stores, warehouses, and food and feed handling establishments. Read and follow the "Precautions" listed below when applying this product in any of these indoor areas. This product is also approved for use in USDA Meat and Poultry Plants in food and feed areas of food/feed handling establishments. Diazinon 4E may be applied only as a crack and crevice treatment or limited spot treatment. See the specific directions for use for treatment of these areas.

Diazinon 4E may also be used outdoors on lawns and ornamentals around the home. See the specific directions for use for treatment of these areas.

INDOOR USE

Indoors Diazinon 4E controls

- ants
- carpet beetles
- scorpions
- brown dog ticks
- cockroaches (waterbugs)
- spiders

In households and in food and feed areas of food/feed handling establishments, this product also aids in the control of the following exposed stages of pantry pests which come into contact with treated surfaces:

- drugstore beetle
- flour beetle
- rice weevil
- cigarette beetle
- Indian meal moth
- sawtooth grain beetle

Precautions: (1) Do not use this product indoors as an overall surface spray or as a space spray; take care not to introduce this product into the air during application. (2) Use only in well-ventilated areas. (3) Do not apply where children are likely to frequently contact treated surfaces. (4) Remove or cover fish bowls and remove pets before application. (5) Do not treat pets with this product. (6) Do not allow children or pets in treated areas until spray has dried. (7) Do not apply this product in patient rooms or in any rooms while occupied by the elderly or infirm. (8) Do not apply to classrooms when in use. (9) In institutions (including, but not limited to office buildings, museums, libraries, and sports facilities), do not apply this product when occupants are present in the immediate area. (10) The solvent used in this formulation is a petroleum distillate which may stain certain plastic, rubber, and asphalt materials such as tiles and floor coverings. Do not treat such materials. (11) Avoid excessive wetting of carpets, floor coverings or unfinished materials because damage may occur. (12) Care should be taken to avoid spotting of walls, wall coverings, and fabrics. (13) Do not apply directly to conduits, motor housings or electrical switch boxes. (14) Do not apply to areas, surfaces or utensils which will contact food or feed. (15) Exposed food should be covered or removed during application. (16) All food processing surfaces and utensils should be covered during application or thoroughly washed with soap and water before use. (17) Clothing is sprayed during application, removed clothing immediately after spraying, wash affected body areas with soap and water, and launder clothing before wearing again.

Mixing Instructions

Dilute Diazinon 4E with water to make a 1/2% or 1% spray and apply as indicated below.

Gals. of finished spray	Amount Diazinon 4E to use for	
	1/2% spray	1% spray
1	1 1/4 fl. oz.	2 1/2 fl. oz.
2	2 1/2 fl. oz.	5 fl. oz.
3	3 3/4 fl. oz.	7 1/2 fl. oz.
10	12 1/2 fl. oz.	25 fl. oz. (1 1/2 pts.)
25	32 fl. oz. (2 pts.)	64 fl. oz. (4 pts.)

* 2 1/2 tablespoons = 1 1/4 fl. oz.

Indoor Use (Except Food and Feed Handling Establishments): Households, Apartments, and Non-Food Areas of Office Buildings (except classrooms in use), Libraries, Hospitals (except patient rooms while occupied), Museums and Sports Facilities (See Food and Feed Handling Establishments for special direction when applying this product in food handling or serving areas in non-residential buildings).

Cockroaches (Waterbugs), Ants, Silverfish: Make spot applications of 1/2% coarse spray or apply with a paintbrush to baseboards, areas around water pipes, cracks and crevices, surfaces behind and beneath cabinets, refrigerators, sinks, stoves and similar areas where these insects hide.

For heavy cockroach infestations, make the first application at a strength of 1% followed by monthly applications of 1/2% spray.

Brown Dog Ticks: Make thorough applications of a 1/2% spray to infested areas around baseboards, window and door frames, wall cracks, sleeping quarters of household pets, and localized areas of floors and floor coverings. Do not use as an overall surface spray. Fresh bedding should be placed in animal quarters following treatment. Do not treat animals with this product.

Carpenter Beetles: Apply a 1/2% spray in spot applications along baseboards and edges of carpeting, under carpeting and rugs and furniture, in closets and on shelving, and wherever these insects are seen or suspected.

Spiders and Scorpions: Apply a 1/2% spray around windows, doors, and along baseboards. Make spot applications to other areas over which these pests may crawl.

Pantry Pests - Exposed Stages (Sawtoothed grain beetle, Flour beetle, Rice weevil, Cigarette beetle, Drugstore beetle, Indian meal moth): Apply a 1/2% spray to shelves and cupboards where food containers suspected of being infested are stored. Remove all food and shelving paper before spraying. Do not replace the food packages until spray has dried. Cover shelves with shelving paper. This treatment is supplemental to good housekeeping, since it will have no effect on insects breeding within food packages. Infested food packages should be destroyed.

Food and Feed Handling Establishments

Places other than private residences in which food or feed is held, processed, prepared or served (includes restaurants, canneries, bakeries, food processing plants, mills, dairies, USDA Meat and Poultry Plants, etc.) Diazinon 4E may be used in the food/feed areas and the non-food/non-feed areas of these establishments. Apply diazinon 4E either as a limited spot or crack and crevice treatment as directed below.

Food/Feed Areas of Food/Feed Handling Establishments

Include areas for receiving, serving, storage, (dry, cold, frozen or raw), packaging (canning, bottling, and grinding), enclosed processing systems (mills, dairies, and systems for processing edible oils and syrups).

APPLICATION OF THIS PRODUCT IN THE FOOD/FEE AREAS OF FOOD HANDLING ESTABLISHMENTS, OTHER THAN AS A CRACK AND CREVICE TREATMENT OR LIMITED SPOT TREATMENT IS NOT PERMITTED.

Limited Spot Treatment

Apply this product diluted to 1/2-1% as a coarse, low-pressure fan spray around water pipes and door frames, to surfaces beneath cabinets, refrigerators, sinks, stoves, storage areas and similar floor areas. Limit spot treatments to floor surfaces where pests have been seen or where they are suspected of hiding. Limit individual spot treatments to an area no larger than 20% of the surface area. Any individual spot treatment must not exceed 2 square feet.

Crack and Crevice Treatment

Apply this product diluted to 1/2-1% with equipment capable of delivering a pin stream of insecticide. Apply in small amounts directly into cracks and crevices in such areas as expansion joints, spaces between equipment and the floor, openings leading to voids, and hollow spaces in walls and equipment legs and bases.

Non-Food/Non-Feed Areas of Food/Feed Handling Establishments: Include garbage rooms, lavatories, floor drains (to sewers), ertiles and vestibules, offices, locker rooms, machine rooms, boiler rooms, mop closets and storage areas (after canning or bottling).

Spot Treatment

Apply this product diluted to a 1/2-1% spray. Apply as a coarse, low-pressure fan spray as a spot treatment along baseboards, to areas around water pipes, beneath cabinets, to surfaces behind and beneath sinks, lockers and lockers, and to storage areas where cockroaches, ants, silverfish and spiders hide.

OUTDOOR USE

Control of pests on lawns and on ornamental plants around the outside of the home.

Precautions: (1) Do not use this product on ornamentals or on turf areas other than around the home. (2) Do not apply this product through any type of irrigation system. (3) This product is highly toxic to bees exposed to direct treatment or to residues on blooming plants. Do not apply this product or allow it to drift to blooming plants if bees are visiting the treatment area. (4) Birds, especially waterfowl, feeding or drinking on treated area may be killed. (5) 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. (6) Do not exceed maximum permitted label rates since rates above those recommended significantly increase potential hazards to birds. (7) Avoid overlapping of sprays. (8) If waterfowl, i.e., ducks, geese, can be expected in the treated lawn after treatment (except spot treatment) water lawn with at least 1/2 inch of water immediately after spraying this product, however, stop watering before puddling occurs. (9) Wear a long-sleeved shirt and long legged pants when spraying. Spray with the wind on your back. Do not spray on windy days. If clothing becomes wet from spray, remove clothing after spraying. Wash thoroughly with soap and water and launder clothing before wearing again.

Pests of Ornamental Plants: To control certain pests on ornamentals, such as Arbutus, Azalea, Birch, Boxwood, Camellia, Carnation, Chrysanthemum, Douglas Fir, Elm, Gladiolus, Hawthorn, Holly, Juniper, Lilac, Locust, Maple, Oak, Pine, Ornamental Plum, Poplar, Rhododendron, Rose, Spruce and Willow, apply the recommended rates indicated in the following chart.

Do not use on Ferns, Poinsettia, Hibiscus, Papaya, Pelea and Gardenia, since injury to the plants may occur. Try to spray underside of leaves and penetrate dense foliage.

Pests	Amount diazinon 4E to use	
	per 3 gals. water	per 100 gals. water
Aphids, Bagworms, Carnation bud mites, Carnation shoot mites, Clover mites, Cyclamen mites, Dipterous leafminers, European pine shoot moths, European red mites, Flea beetles, Holly bud moths, Leafhoppers, Obscure root weevils, Omnivorous leafhoppers, Privet mites, Scale crawlers Cottony cushion, Lecanium, Pine needle, San Jose scale, Thrips, Twospotted spider mites, Juniper Webworms, Whiteflies	1/2 fl. oz.	1 pt.
Apple-and-thorn skeletonizers, Cotoneaster webworms, Fall webworms, Hemlock cherries, Oak loopers, Obliquebanded leafrollers, Pear slugs, Tent caterpillars	1 1/2 fl. oz.	3 pts.

* 1 fl. oz. = 2 tbsp., 16 fl. oz. = 1 pt.

Mimosa Webworm: Mix 1/2 fl. oz. (1 tablespoon) in 3 gals. of water (or 1 qt. in 100 gals. of water) and apply as a thorough foliar spray when adults first appear. Make a second and third application at 4-5 week intervals.

Home Lawn Pests: To control pests listed below, apply recommended rates.

Pests	Rate per 1,000 sq. ft.		Remarks
	diazinon 4E	Water	
Lawn chinch bugs	2-3 fl. oz.	3 gals.	Use higher rate for longer residual control and in lawns of dense growth such as St. Augustine lawns.
Ants Armyworms Bermudagrass mites, Clover mites, Springtails (Collembola), Crickets, Cutworms, Digger wasps, Earwigs, Frit flies, Lawn billbugs, Leafhoppers, Sod webworms (Lawn moth), Sowbugs (pillbugs)	2-3 fl. oz.	3 gals.	Spot spray anthills and wasp ground nest openings. For digger wasps apply at dusk when the wasps are not active. For frit flies, mow grass and water well before treatment but delay application until grass is dry.
Brown dog ticks Chiggers, Fleas	3 fl. oz.	3 gals.	Note: Do not apply to animals. For brown dog ticks spray grass and under shrubbery particularly near house.
Hyperodes weevil	3 fl. oz.	3 gals.	Treat problem areas in mid-April and again in mid-May.
Milkpedes	3 fl. oz.	3 gals.	
Rhodesgrass scales	3 fl. oz.	3 gals.	Apply when crawlers are in a surge.
White grubs (such as Japanese beetle larvae, European chafer, Southern chafer)	3 fl. oz.	3 gals.	Apply 2 or 3 times between late July and early October.

Nuisance Pests Outside the Home

Ants, Bees, Beetles, Bugs, Brown Dog Ticks, Chiggers, Clover Mites, Cockroaches, Crickets, Earwigs, Fleas, Flies, Millipedes, Sowbugs (Pillbugs), Spiders, and Springtails (Collembola).

Mix 3 fl. oz. in 3 gals. of water.

Thoroughly spray window and door screens and sills, foundations, porch and patio walls, entranceways, walks, garbage cans, tree trunks, and into cracks and other places where insects can hide. Repeat application as necessary.

To prevent entry of insects into the house, spray a five-foot band of soil around the house next to the foundation and spray the foundation of the house to a height of 2-3 feet. Repeat application as necessary.

Storage and Disposal

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 residue 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, reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

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, contact Chem-Tox for assistance at (708)382-5555.

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