



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

JAN 27 1994

OFFICE OF
PREVENTION, PESTICIDES AND
TOXIC SUBSTANCES

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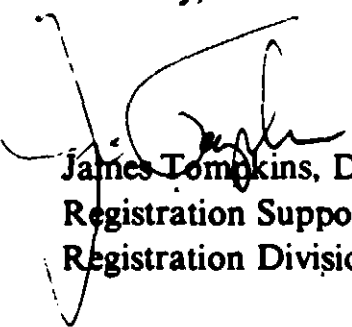
SUBJECT: Label Amendment Submission of 7/29/93 in Response to PR Notice 93-7
EPA Reg. No. 16-141,
Dragon Thiodan Insect Spray

Dear Registrant:

After review of the labeling cited above and submitted in connection with PR Notice 93-7, the Agency has determined that **this product does not fall within the scope of PR Notice 93-7**. Therefore no alterations to the label are necessary to reflect the requirements of the Worker Protection Standard, so your label is being returned to you.

You should communicate with your Product Manager concerning the amendments proposed in your concurrent submission.

Sincerely,


James Tompkins, Deputy Chief
Registration Support Branch
Registration Division (7505W)

Enclosures

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contains at least 50% recycled fiber

[FRONT PANEL]

**DRAGON®
THIODAN® INSECT SPRAY**

Controls insects on listed vegetables, fruits and ornamentals.

ACTIVE INGREDIENT:	BY WT.
Endosulfan (hexachlorobenzothioethane-2,4,3-benzodioxathiepin 3-oxide)	9.9%
INERT INGREDIENTS:	<u>90.1%</u>
TOTAL:	100.0%

This product contains aromatic petroleum solvent.
This product contains 3/4 lbs. endosulfan per gallon.

**Keep Out of Reach of Children
DANGER
See back panel for additional precautionary statements**

NET CONTENTS 8 OZ / 1 PT / 1 QT

[BACK/SIDE/OTHER PANEL(S), BOOKLET]

STATEMENT OF PRACTICAL TREATMENT

- IF SWALLOWED:** Call a physician or Poison Control Center immediately. **DO NOT INDUCE VOMITING.**
Vomiting may cause aspiration pneumonia.
- IF INHALED:** Remove victim to fresh air. Apply artificial respiration if indicated.
- IF ON SKIN:** Remove contaminated clothing and wash affected areas with soap and water.
- IF IN EYES:** Flush eyes with plenty of water. Call a physician immediately.
- NOTE TO PHYSICIAN:** Thiodan is a central nervous system stimulant. There is no specific antidote. Treat symptomatically. Barbituric acid derivatives may be used in treatment. Solvent presents aspiration hazard. Gastric lavage may be indicated if material was taken internally.

PRECAUTIONARY STATEMENTS

Hazards to Humans & Domestic Animals

- DANGER:** Corrosive! Causes irreversible eye damage. Do not get into eyes on on clothing. Wear goggles or safety glasses. May be fatal if swallowed, inhaled or absorbed through the skin. Do not breathe spray mist. Avoid contact with skin, eyes or clothing. Wash with soap and water after handling and before eating or smoking. Wash contaminated clothing with soap and water before reuse. Avoid contamination of feed and foodstuffs. Food utensils such as tablespoons must not be used for food purposes after use for measuring pesticides.
- WARNING:** During mixing, loading and spraying, wear unlined rubber gloves and a pesticide respirator jointly approved by the Mine Safety and Health Administration (MSHA) and the National Institute for Occupational Safety and Health (NIOSH) for protection against endosulfan.

ENVIRONMENTAL HAZARDS

This product is toxic to fish, birds and other wildlife. Birds feeding on treated areas may be killed. Do not apply directly to water. Do not apply when weather conditions favor drift from areas treated. Do not contaminate water by cleaning of equipment or disposal of wastes. Apply this product only as specified on this label.

PROTECT BEES: This pesticide is toxic to bees exposed to direct application. Applications should be time to coincide with periods of minimum bee activity between late evening and early morning.

SEE COMPLETE DIRECTIONS FOR USE IN ATTACHED PAMPHLET.

List of Insects controlled by Dragon Thiodan Insect Spray

Aphids	False chinch bug	Potato psyllid
Apple aphid	European corn borer	Potato tuberworm
Apple rust mite	Green stink bug	Rindworms
Armyworm	Flea beetles	Rose chafer
Banded cucumber beetle larvae	Green peach aphid	Rosy apple aphid
Bean leaf skeletonizer	Imported cabbageworm	Rusty plum aphid
Black bean aphid	Harlequin bug	Squash beetle
Black cherry aphid	Hornworms	Squash bug
Black peach aphid	Meadow spittlebug	Squash vine borer
Blister beetle	Leaf-footed bug	Stink bugs
Blueberry bud mite	Lesser peach tree borer	Strawberry aphid
Box elder bug	Omnivorous leaf roller	Striped flea beetle
Cabbage aphid	Melonworm	Sweet potato flea beetle
Cabbage flea beetle	Mexican bean beetle	Tarnished plant bug
Cabbage looper	Peach silvermite	Taxus budmite
Colorado potato beetle	Peach tree borer	Threelined potato beetle
Cross-striped cabbageworm	Peach twig borer	Tomato fruitworm
Crown mite	Plum rust mite	Tomato russet mite
Cutworm	Pepper maggot	Western bean cutworm
Cucumber beetle	Pickleworm	Whitefly
Cyclamen mite	Potato leafhopper	Yellow-striped armyworm
Diamond back moth larvae	Potato flea beetle	Zimmerman pine moth
Dogwood borer		

A broad-spectrum insect spray that kills 67 listed insects on vegetables, fruits & ornamentals.

READ ALL WARNINGS AND PRECAUTIONS ON THE CONTAINER BEFORE USING THIS PRODUCT.

DIRECTIONS FOR USE

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

FOR HOMEOWNER USE ONLY. In the garden, apply DRAGON® Thiodan when insects first appear and repeat as required to maintain effective control. Coverage of both upper and lower leaf surfaces is essential for good control. Approximately 1 gallon of dilute spray will be required per 100 feet of row. Follow the time intervals between last application and harvest indicated by number in () following the crop. If insect control is required beyond the listed time interval, supplement the control program with other suitable DRAGON® pesticides.

CONVERSION TABLE: 3 Tsp. = 1 Tablespoon (Tbs.) = 1/2 ounce (oz.)

VEGETABLES

BEANS (3 days): To control black bean aphid, bean leaf skeletonizer, cucumber beetle, green stink bug, Mexican bean beetle and western bean cutworm apply 2 2/3 Tbs. (1 1/2 oz.) per gallon of water. Do not exceed 3 applications per season. Do not feed threshing to domestic animals nor allow them to feed in treated areas.

BROCCOLI and CABBAGE (7 days), BRUSSELS SPROUTS and CAULIFLOWER (14 days): To control cabbage aphid, cabbage looper, cross-striped cabbageworm, diamond-back moth larvae, flea beetle, harlequin bug, imported cabbageworm, stink bug, armyworms and cutworms apply $2\frac{1}{2}$ Tbs. ($1\frac{1}{2}$ oz.) per gallon of water.

CARROTS (7 days): To control aphids apply $2\frac{1}{2}$ Tbs. ($1\frac{1}{2}$ oz.) per gallon of water. Do not exceed 2 applications. Do not use tops for food or feed.

CELERY (4 days): To control cabbage looper apply $2\frac{1}{2}$ Tbs. ($1\frac{1}{2}$ oz.) per gallon of water. For green peach aphid apply $1\frac{1}{2}$ Tbs. ($\frac{2}{3}$ oz.) per gallon of water. Do not exceed 3 applications per season on celery.

COLLARDS, KALE, MUSTARD GREENS, SPINACH (21 days): To control aphids, cabbage flea beetle, cabbage looper, diamond-back moth larvae, harlequin bug, imported cabbageworm and crown mite (on spinach), apply 2 Tbs. (1 oz.) per gallon of water. Do not exceed 1 application.

CUCUMBERS, MELONS, SUMMER and WINTER SQUASH (May be applied up to and including day of harvest): To control aphids, cucumber beetles, striped flea beetle, melonworm, pickleworm, rindworm (on watermelons), squash beetle, squash bug and squash vine borer apply $2\frac{1}{2}$ Tbs. ($1\frac{1}{2}$ oz.) per gallon of water. For vine borer control, apply weekly to flower buds, stems and vines beginning when moths first appear. For cabbage looper and omnivorous leaf roller on melons, apply $2\frac{1}{2}$ Tbs. ($1\frac{1}{2}$ oz.) per gallon of water.

EGGPLANTS (1 day): To control Colorado potato beetle, flea beetle, aphids and whitefly apply $1\frac{1}{2}$ Tbs. ($\frac{2}{3}$ oz.) per gallon of water.

LETTUCE (14 days): To control aphids, cabbage looper, diamond-back moth larvae and imported cabbageworm, apply $2\frac{1}{2}$ Tbs. ($1\frac{1}{2}$ oz.) per gallon of water. Do not exceed 3 applications after thinning head lettuce and remove outside leaves at harvest. Do not exceed 2 applications per season on leaf lettuce. Do not feed crop refuse to domestic animals.

PEPPERS (4 days*): To control aphids, flea beetles, hornworms and pepper maggot apply $1\frac{1}{2}$ to $2\frac{1}{2}$ Tbs. ($\frac{2}{3}$ to $1\frac{1}{2}$ oz.) per gallon of water. [*1 day time intervals if maximum of $1\frac{1}{2}$ Tbs. ($\frac{2}{3}$ oz.) per gallon of water is used.]

POTATOES (May be used up to day of harvest): To control aphids, armyworms, Colorado potato beetle, stink bug, leaf-footed bug, potato flea beetle, potato leafhopper, potato tuberworm, potato psyllid, European corn borer, false chinch bug, three-lined potato beetle and whitefly apply $2\frac{1}{2}$ Tbs. ($1\frac{1}{2}$ oz.) per gallon of water. Do not plant root crops other than carrots, potatoes, sugar beets and sweet potatoes as follow-up crops.

SWEET POTATOES (May be used up to day of harvest): To control sweet potato flea beetle apply $1\frac{1}{2}$ Tbs. ($\frac{2}{3}$ oz.) per gallon of water. Begin applications shortly after transplanting or as soon as flea beetles appear. To control banded cucumber beetle larvae (aids in control of, and for use in South Central states only), apply $2\frac{1}{2}$ Tbs. ($1\frac{1}{2}$ oz.) per gallon of water. Broadcast the spray and work into the soil to a depth of approximately 3 inches making a single treatment just prior to plant set. Do not feed treated potatoes to domestic animals.

TOMATOES (1 day): To control blister beetle, Colorado potato beetle, flea beetle and aphids apply $1\frac{1}{2}$ Tbs. ($\frac{2}{3}$ oz.) per gallon of water. To control hornworms, tomato russet mite, tomato fruitworm, yellow-striped armyworm, stink bug, cabbage looper and whitefly apply $2\frac{1}{2}$ Tbs. ($1\frac{1}{2}$ oz.) per gallon of water.

FRUITS

APPLES (30 days): To control apple aphids, rosy apple aphids, apple rust mite, apply $1\frac{1}{2}$ Tbs. ($\frac{2}{3}$ oz.) per gallon of water and spray entire tree thoroughly. Do not feed pomace from treated apples to domestic animals. Do not exceed 2 applications during the fruiting period. Do not feed cull fruits to domestic animals nor allow them to feed in treated areas.

BLUEBERRIES (postharvest): To control blueberry bud mite apply $1\frac{1}{2}$ Tbs. ($\frac{2}{3}$ oz.) in one gallon of water. Apply immediately after harvest and repeat 6 to 8 weeks later. Do not apply after buds are well formed.

CHERRIES (21 days): To control black cherry aphid, plum rust mite apply 1¹/₂ Tbs. (2/3 oz.) per gallon of water and spray entire tree thoroughly. Do not exceed 2 applications after shuck split. To control mineola moth in Michigan only, apply 2²/₃ Tbs. (1¹/₂ oz.) per gallon of water at the delayed dormant stage. Do not exceed 2 applications after shuck split. Do not feed cull fruits to domestic animals nor allow them to feed in treated areas.

PEACHES, APRICOTS, NECTARINES (30 days): To control black cherry aphids, black peach aphid, green peach aphid, peach twig borer, rusty plum aphid and peach silvermite apply 1¹/₂ Tbs. (2/3 oz.) per gallon of water and spray entire tree thoroughly. To control catfacing insects (stink bug type) apply 1¹/₂ Tbs. (2/3 oz.) per gallon of water. Apply at petal fall and at shuck-off. Do not exceed 2 applications during the fruiting period. To control peach tree borer and lesser peach tree borer, apply 2 Tbs. (1 oz.) per gallon of water. Spray thoroughly to cover all bark areas from ground to scaffold limbs. For lesser peach tree borer, thoroughly wet trunk and main branches. Usually 2 applications are required — one immediately after harvest and a second 3 to 4 weeks later. Do not feed cull fruits to domestic animals nor allow them to feed in treated areas.

PLUMS, PRUNES (7 days): For control of peach tree borer and lesser peach tree borer, follow directions as listed under "Peaches, Apricots, Nectarines". Do not feed cull fruits to domestic animals nor allow them to feed in treated areas.

PUMPKINS (1): To control aphids, cucumber beetles, squash vine borer, striped flea beetle apply 2²/₃ Tbs. (1¹/₂ oz.) per gallon of water. For squash vine borer, apply weekly to flower buds, stems and vines beginning when moths first appear. Do not apply within one day of harvest.

STRAWBERRIES (4 days): To control cyclamen mite, apply 5¹/₂ Tbs. (2²/₃ oz.) in 3 gallons of water applied to 100 feet of row. Do not reapply within 35 days when fruit is present. To control meadow spittle bug, strawberry aphids and tarnished plant bug, apply 2²/₃ Tbs. (1¹/₂ oz.) in 1¹/₂ gallons of water applied to 100 feet of row. Do not reapply within 15 days or more than twice within a 35 day period when fruit is present.

ORNAMENTALS & FLOWERS

OUT OF DOORS: To control aphids, cyclamen mites, whitefly and rose chafer, apply 1²/₃ Tbs. (4/3 oz.) per gallon of water. On chrysanthemums best results will be obtained if applied before plants flower. DO NOT apply to "Bonnafon Deluxe," "Fred Shoemith," and "White Knight" chrysanthemums as injury may result. DO NOT use on birch trees.

SHADE TREES (except birch), SHRUBS: To control aphids apply 1²/₃ Tbs. (4/3 oz.) per gallon of water.

PINE (Austrian, Jack, Red, Scotch, White): To control Zimmerman pine moth, apply 2¹/₂ Tbs. per gallon of water. Apply in mid-April and again if necessary in late fall. Thoroughly wet bark and main stem, especially where branches join main stem.

DOGWOODS: To control Dogwood borer, apply 1²/₃ Tbs. per gallon of water. Apply to trunk and lower limbs in May and June before borers enter the trunk. Apply thoroughly, particularly to injured areas and old borer wounds. Repeat applications 2 to 3 times at 10 day intervals.

BOX ELDER: To control box elder bug apply 5¹/₂ Tbs. (2²/₃ oz.) per gallon of water. Spray foliage and trunk when insects first appear. Repeat as required in late summer or fall. Spray trunks, outside walls, fences and other places where bugs congregate.

TAXUS: To control taxus bud mite, apply 1²/₃ Tbs. (4/3 oz.) per gallon of water. Apply 3-5 applications beginning mid-May. Thorough treatment of foliage, twigs and bark is essential.

HOME GREENHOUSE USE

To control aphids, cyclamen mite, whitefly apply 1¹/₂ Tbs. (2/3 oz.) per gallon of water. Wear a mask or respirator passed by the Mine Safety & Health Administration (MSHA) and the National Institute for Occupational Safety and Health (NIOSH) for endosulfan (THIODAN) protection under the provisions of 30 CFR Part 11.

PECANS

To control black pecan aphid apply 1 1/2 Tbs. per gallon of water. Do not apply after shuck split. Do not allow domestic animals to feed in treated areas.

STORAGE: Store in original container in an area inaccessible to children and pets. Do not use or store near heat or open flame. Do not store near feed or foodstuffs.

PESTICIDE DISPOSAL: Product remaining in original container should be disposed of by securely wrapping original container in several layers of newspaper and discarding in trash.

CONTAINER DISPOSAL: Do not reuse empty container. Securely wrap in newspaper and discard in trash.

NOTICE: Buyer assumes all risks of use, storage or handling of this material not in strict accordance with DIRECTIONS FOR USE and PRECAUTIONARY STATEMENTS stated on this label.

Thiodan® is a registered trademark of Canadian Hoechst, Ltd., U.S. Patent No. 2,799,685.

Manufactured by
DRAGON CORPORATION
Roanoke, VA 24019