



PM 13 279-2924 File 1045

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

APR 18 1994

George L. Meindl
FMC CORP.
ACG SPECIALITY PRODUCTS
1735 Market Street
Philadelphia, PA 19103

OFFICE OF
PREVENTION, PESTICIDES AND
TOXIC SUBSTANCES

Subject: Label Amendment Submission of 09/03/93 in Response to PR Notice 93-7
EPA Reg. No. 279-2924
THIODAN 3 E.C.

Dear Registrant:

The labeling cited above and submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended, is accepted subject to the comments reflected on the enclosed sheet. A copy of your proposed labeling stamped "ACCEPTED WITH COMMENTS" is enclosed.

WHAT THIS ACCEPTANCE MEANS:

Based on your certification, the Agency has accepted the labeling changes that are necessary to comply with the Worker Protection Standard (WPS) labeling requirements of 40 CFR part 156, subpart K, described in PR Notices 93-7 and 93-11. Any other labeling changes submitted in connection with this amendment application but not directly related to compliance with the WPS have not been reviewed or accepted by the Agency. If you wish to make such changes, you must submit a separate amendment application proposing them. If your product is currently suspended, the acceptance of this labeling amendment does not affect the suspension in any way.

WHAT YOU NEED TO DO NEXT:

By the next label printing make all the specified changes to your labeling. Send to EPA one (1) copy of the final printed labeling:

- BEFORE selling or distributing any product bearing the final printed labeling
- AND
- WITHIN one year from date of this acceptance.



Recycled/Recyclable
Printed with Soy/Canola Ink on paper that
contains at least 50% recycled fiber

2075

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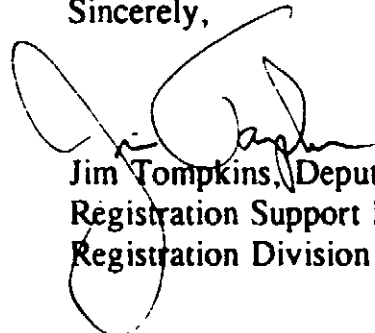
Submit the final printed labeling via the U.S. Postal Service to:

Document Processing Desk (FIN-LABEL)
Office of Pesticide Programs (7505C)
U.S. Environmental Protection Agency
401 M Street, SW
Washington, D.C. 20460-0001

Hand or courier deliveries of final printed labeling may be made to:

Document Processing Desk (FIN-LABEL)
Office of Pesticide Programs
Room 266A, Crystal Mall 2
1921 Jefferson Davis Highway
Arlington, VA 22202

Sincerely,



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

Attachment

Code 1485

Net Contents

THIODAN[®]

3EC INSECTICIDE

For Agricultural or Commercial Use Only.

EPA Reg. No. 279-2924

EPA Est. 279-

Active Ingredients:	By Wt.
*Endosulfan: (Hexachlorohexahydromethano-2,4,3-benzodioxathiepin 3-oxide).....	33.7%
Inert Ingredients:**	66.3%
	100.0%

*Thiodan

**Contains Xylene Range Aromatic Solvents.

Thiodan 3 E.C. contains 3 pounds of endosulfan per gallon.

KEEP OUT OF REACH OF CHILDREN

 DANGER-POISON 

PELIGRO

See Other Panels for Additional Precautionary Information.

PRECAUCION AL USUARIO: Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand this label, find someone to explain it to you in detail.)

STATEMENT OF PRACTICAL TREATMENT

If swallowed: Call a physician or Poison Control Center immediately. If possible, vomiting should be induced under medical supervision. Drink one or two glasses of water and induce vomiting by giving one (1) ounce of syrup of ipecac, if available, or by touching the back of the throat with a finger. Do not induce vomiting or give anything by mouth to a person who is unconscious or convulsing.

If inhaled: Remove victim to fresh air. Apply artificial respiration if indicated.

If on skin: Remove contaminated clothing and wash skin with soap and water. *delete*

If in eyes: Flush eyes with plenty of water. Call a physician immediately.

Note to Physicians: Endosulfan is a central nervous system stimulant absorbable by mouth, inhalation or through contact with skin. It may cause convulsions. There is no specific antidote. Diazepam I.V. is the drug of choice. Barbituric acid derivatives such as Phenobarbital may be used additionally. A neuromuscular blocking agent may be used if convulsions persist. This type of drug may be used only if complete control of respiration can be maintained. Epinephrine derivatives are absolutely contraindicated.

For Emergency Assistance Call (800) 331-3148.

FMC[®]

FMC Corporation
Agricultural Chemical Group
Philadelphia PA 19103

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PRECAUTIONARY STATEMENTS
Hazards to Humans (& Domestic Animals)

Precautionary Statements:

Fatal if swallowed. May be fatal if inhaled or absorbed through the skin. Do not breathe vapors or spray mist. Causes eye damage. Do not get in eyes, on skin, or on clothing.

Personal Protective Equipment:

Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for category G on an EPA chemical resistance category selection chart.

Handlers who may be exposed to the dilute through application or other tasks must wear:

- Chemical-resistant protective suit
- Chemical-resistant gloves, such as barrier laminate or viton
- Chemical-resistant footwear plus socks
- Chemical-resistant headgear for overhead exposure
- A respirator with either an organic vapor-removing cartridge with a pre-filter approved for pesticides (MSHA/NIOSH approval number prefix TC-23C), or a canister approved for pesticides (MSHA/NIOSH approval prefix TC-14G)

Handlers who may be exposed to the concentrate through mixing, loading, application, or other tasks must wear:

- Chemical-resistant protective suit *not needed with*
- Chemical-resistant gloves, such as barrier laminate or viton.
- Chemical-resistant footwear plus socks.
- Protective eyewear
- Chemical-resistant headgear
- Chemical-resistant apron when mixing or loading
- A respirator with either an organic vapor-removing cartridge with a pre-filter approved for pesticides (MSHA/NIOSH approval number prefix TC-23C), or a canister approved for pesticides (MSHA/NIOSH approval prefix TC-14G)

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

User Safety Recommendations:

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

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, to areas where surface water is present or to intertidal areas below the mean high water mark. Due to the risk of runoff and drift, do not apply within a distance of 300 feet of lakes, ponds, streams, and estuaries. 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 product must not be used in areas where impact on threatened endangered species is likely. Contact your State Fish and Game Agency before applying this product. Apply this product only as specified on this label.

This pesticide is toxic to bees exposed to direct application. Applications should be timed to coincide with periods of minimum bee activity, usually between late evening and early morning.

Physical/Chemical Hazards

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

ACCEPTED
with COMMENTS
In EPA Letter Dated

1988 18

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

279-2924

4045

DIRECTIONS FOR USE

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

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

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), notification to workers, and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 24 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water is:

- Chemical-resistant protective suit
- Chemical-resistant gloves, such as barrier laminate or viton
- Chemical-resistant footwear plus socks
- Chemical-resistant headgear for overhead exposure

Notify workers of the application by warning them orally and by posting warning signs at entrances to treated areas.

STORAGE AND DISPOSAL

Pesticide Storage

Do not store in or around the home.

Do not store below 20°F. (-7°C).

Do not use or store near heat, open flame or hot surfaces.

Keep out of reach of children and animals. Store in original containers only. Store in a cool, dry place and avoid excess heat. Carefully open containers. After partial use, replace lid and close tightly. Do not put concentrate or dilute materials into food or drink containers. Do not contaminate other pesticides, fertilizers, water, food, or feed by storage or disposal.

In case of spill, avoid contact, isolate area and keep out animals and unprotected persons. Confine spills. Call FMC: 1 (800) 331-3148.

To confine spill: If liquid, dike surrounding area or absorb with sand, cat litter or commercial clay. If dry material, cover to prevent dispersal. Place damaged package in a holding container. Identify contents.

Pesticide Disposal

Pesticide wastes are acutely hazardous. 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 Disposal

Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities. Do not cut or weld metal containers.

Returnable/Refillable Sealed Containers

Do not rinse container. Do not empty remaining formulated product. Do not break seals. Return intact to point of purchase.

GENERAL INSTRUCTIONS

Not For Use Or Storage In Or Around The Home.

Do not use in undiluted form.

Apply the listed amount per acre when insects first appear and repeat as required, unless otherwise noted, to maintain effective control. Use in sufficient water for thorough coverage of listed crops, unless otherwise noted. Coverage of upper and lower leaf surfaces is essential for good control. For ground application, apply recommended amount of pesticide in a minimum of 10 gallons of water per acre on vegetable or row

crops. Observe use limitations. If insect control is required beyond the following use patterns, supplement the control program with other suitable pesticides.

When applying this material by aircraft, mix the recommended amount with sufficient water to provide a minimum of 1 gallon of finished spray per acre on vegetable and field crops, unless otherwise noted, and a minimum of 20 gallons of finished spray per acre on fruit and nut trees and on vines. Where more than 2 quarts of this material are recommended, mix with sufficient water to provide a minimum of finished spray equal to twice the amount of Thiodan 3 E.C. insecticide used. Observe days interval between last application and harvest indicated by number in () following the crop.

Cherry, Peach, Plum Nursery Stock Dip

Insects Controlled	Rate of Application	Method of Application
Peachtree Borer	2½ quarts per 40 gallons	Mix thoroughly. Immerse trees so that the roots and crowns are covered well above the grafting bud scar.
Plant immediately or dry before returning stock to storage.		

Citrus (Non-Bearing Trees and Nursery Stock)

Insects Controlled	Rate of Application	Method of Application
Citrus Aphid	¼ quart per 100 gallons or a maximum of 3½ quarts per acre	Make applications when insects appear or feeding is noticed.

Do not apply to bearing trees or trees that will bear fruit within twelve months.

Do not make more than 3 applications per year.

Do not exceed a maximum of 3.0 lbs. active ingredient (i.e., 4 quarts) per acre per year.

Tomatoes (Field and Greenhouse) (2)

Insects Controlled	Rate of Application	Method of Application
Aphids Blister Beetles Colorado Potato Beetle Flea Beetles Tomato Hornworm Webworm (California Only)	¼ to 1½ quarts per acre	Make applications when insects appear or feeding is noticed.
Cabbage Looper Stink Bugs	1 to 1½ quarts per acre	
Tomato Fruitworm Tomato Russet Mite Whitefly Yellowstriped Armyworm	1½ quarts per acre	
Whitefly	¼ quart per 100 to 200 gallons of water	

Do not make more than 6 applications per year.

Do not exceed a maximum of 3.0 lbs. active ingredient (i.e., 4 quarts) per acre per year.

COMMERCIALLY GROWN ORNAMENTALS

Ornamental Plants

Leatherleaf Fern (Leather Holly Fern)

Insects Controlled	Rate of Application	Method of Application
Leatherleaf Fern Borer	¼ quart per 100 gallons	Begin treatment when first larval feeding is observed in the mid-vein area at the base of the leaflets. Repeat at intervals of 2 to 3 weeks as necessary.

Do not exceed a maximum of 3.0 lbs. active ingredient (i.e., 4 quarts) per acre per year.

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Ornamentals (Greenhouse, and Out-of-Doors)

Insects Controlled	Rate of Application	Method of Application
Aphids Cyclamen Mite Rose Chafer Whitefly	½ quart per 100 gallons	Make applications when insects appear or feeding is noticed.
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. Do not exceed a maximum of 3.0 lbs. active ingredient (i.e., 4 quarts) per acre per year.		

Ornamental Trees and Shrubs

Dogwood, Lilac

Insects Controlled	Rate of Application	Method of Application
Dogwood Borer Lilac Borer	½ to 1½ quarts per 100 gallons (1½ to 2½ teaspoons per gallon)	Apply in early June and repeat in 10 to 14 days. Drench all bark areas down to the ground level.
Food utensils such as teaspoons must not be used for food purposes after use in measuring pesticides. Do not exceed a maximum of 3.0 lbs. active ingredient (i.e., 4 quarts) per acre per year.		

Douglas Fir (Grown for Ornamentals, Nursery Stock or Christmas trees)—Pacific Northwest Only

Insects Controlled	Rate of Application	Method of Application
Aphids Cooley Spruce Gall Adeigid Douglas Fir Needle Midge	½ quart per 100 gallons (1½ teaspoons per gallon)	Make applications when insects appear or feeding is noticed. For control of gall adelgid, apply when white cottony tufts appear. For control of needle midge, apply in late April or early May just before buds open.
Food utensils such as teaspoons must not be used for food purposes after use in measuring pesticides. Do not exceed a maximum of 3.0 lbs. active ingredient (i.e., 4 quarts) per acre per year.		

Pines (Austrian, Jack, Red, Scotch, White)

Insects Controlled	Rate of Application	Method of Application
Zimmerman Pine Moth	1 quart per 100 gallons (2 teaspoons per gallon)	Apply in mid-April and again, if necessary, in late fall. Thoroughly wet bark and main stem, especially where branches join main stem.
Food utensils such as teaspoons must not be used for food purposes after use in measuring pesticides. Do not exceed a maximum of 3.0 lbs. active ingredient (i.e., 4 quarts) per acre per year.		

Shade Trees (except Birch), Shrubs

Insects Controlled	Rate of Application	Method of Application
Aphids	½ quart per 100 gallons (1½ teaspoons per gallon)	Make applications when insects appear or feeding is noticed.
Food utensils such as teaspoons must not be used for food purposes after use in measuring pesticides. Do not exceed a maximum of 3.0 lbs. active ingredient (i.e., 4 quarts) per acre per year.		

Spruce (New England Area Only)

Insects Controlled	Rate of Application	Method of Application
Spruce Gall Aphid	½ quart per 100 gallons (1½ teaspoons per gallon)	Apply in late April or early May when aphids are present but before galls are formed.
Food utensils such as teaspoons must not be used for food purposes after use in measuring pesticides. Do not exceed a maximum of 3.0 lbs. active ingredient (i.e., 4 quarts) per acre per year.		

Taxus

Insects Controlled	Rate of Application	Method of Application
Taxus Bud Mite	½ quart per 100 gallons (1½ teaspoons per gallon)	Make 3 to 5 applications beginning in mid-May. Thoroughly spray foliage, twigs, and bark.
Black Vine Weevil	1½ quarts per 100 gallons (2½ teaspoons per gallon)	Spray thoroughly and drench the soil under the plants. Apply when the weevils first appear and repeat in 14 days.
Food utensils such as teaspoons must not be used for food purposes after use in measuring pesticides. Do not exceed a maximum of 3.0 lbs. active ingredient (i.e., 4 quarts) per acre per year.		

Dealers Should Sell in Original Packages Only.

Terms of Sale or Use: On purchase of this product buyer and user agree to the following conditions.

Warranty: FMC makes no warranty, expressed or implied, concerning the use of this product other than indicated on the label. Except as so warranted, the product is sold as is. Buyer and user assume all risk of use and/or handling and/or storage of this material when such use and/or handling and/or storage is contrary to label instructions.

Directions and Recommendations: Follow directions carefully. Timing and method of application, weather and crop conditions, mixture with other chemicals not specifically recommended and other influencing factors in the use of this product are beyond the control of the seller and are assumed by the buyer at his own risk.

Use of Product: FMC's recommendations for the use of this product are based upon tests believed to be reliable. The use of this product being beyond the control of the manufacturer, no guarantee, expressed or implied, is made as to the effects of such or the results to be obtained if not used in accordance with directions or established safe practice.

Damages: Buyer's or user's exclusive remedy for damages for breach of warranty or negligence shall be limited to direct damages not exceeding the purchase price paid and shall not include incidental or consequential damages.

Thiodan® is a registered trademark of Hoechst AG. (3212-1/92-A)
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