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533038

Ms. Nancy Hilton FMC Corporation Agricultural Products Group 1735 Market Street Philadelphia, PA 19103 NOV 1 3 1997

Dear Ms. Hilton:

Subject: Amendment- Delete unsupported crops including
Alfalfa (grown for forage), Artichokes,
Peas(seed crop), Safflower, Sugar Beets,
and Sunflowers

Thiodan 3EC EPA Registration Number 279-2924 Your submission dated August 11, 1997

The amendment referred to above, submitted in connection with a registration under FIFRA section 3(c)(7)(a), is acceptable provided that you:

- 1. Submit and/or cite all data or other material required for registration/reregistration of your product under FIFRA section 3(c)(5) or FIFRA section 4 when the Agency requires all registrants of similar products to submit such data.
- 2. Make the labeling changes listed below before you release the product for shipment bearing the amended labeling:
- a) Regarding the Small Grains use retention, the Agency understands that you, together with other members of the Endosulfan Task Force, are now actively engaged in satisfying the overdue data requirement and that you will keep the Agency apprised of progress on the study involving winter wheat. This letter is not to be construed as a final determination by the Agency regarding the acceptability of this use pattern.
- b) In the Ingredients Statement, revise "Active Ingredients" to "Active Ingredient", since there is only one. Also, in the footnote **, change "Solvents" to "Solvent".

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- c) In the Statement of Practical Treatment, add "Get medical attention." to the end of the If inhaled and the If on skin advice sections.
- d) At the end of the Note to Physicians, add "This formula contains petroleum hydrocarbons (xylene range aromatic solvent). Care should be taken to prevent aspiration because of the possibility of chemical pneumonia or pulmonary edema due to the organic solvent in the formulation.".
- e) Replace the current HAZARDS TO HUMANS AND DOMESTIC ANIMALS text with the following:

Fatal if swallowed. Corrosive. Causes irreversible eye damage. Do not get in eyes, on skin, or on clothing. May be fatal if inhaled or absorbed through skin. Do not breathe vapor or spray mist. Do not contaminate food or feed. Keep out of reach of domestic animals. Food utensils such as spoons and measuring cups must not be used for food purposes after use in measuring pesticides.

- f) In the Personal Protective Equipment (PPE) listing, for consistency with the rest of the entries, capitalize the "C" of "chemical-resistant apron", and the "R" of "respirator'.
- g) Add the heading **Engineering Control Statement** over the paragraph beginning "When handlers use closed systems".
- h) Add a third item to the USER SAFETY RECOMMENDATIONS as follows: "Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.".
- i) In the Environmental Hazards, after "...are important resources." add "Do not contaminate water by cleaning of equipment or disposal of equipment washwaters.".
- j) In the PHYSICAL/CHEMICAL HAZARDS, revise "open flamer" to "open flame".
- k) Directly above "See supplemental label for directions for use in California", add "This product is not intended for use in California under this label.". You have indicated that FMC intends to split the California label out as a separate product, as AgrEvo has done. Once that separate California product has been registered, the referral statement on EPA Reg. No. 279-2924 (the all states except California Thiodan 3 EC) should be modified to state "This product is not intended for use in California. For California, use Thiodan

3EC Insecticide For Use in California."[or whatever name you choose for your new California-only 3EC product].

- 1) For Apricots, Nectarines, and Peaches(21), for Peachtree Borer and Lesser Peachtree Borer, should a maximum number of quarts entry appear in the Rate of Application as it does for control of these same pests on Plums and Prunes? Such a modified entry would then read "1 quart per 100 gallons or 2 2/3 to 3 1/3 quarts per acre". Also in the Rate of Application, revise "West Coast-" to "Pacific Northwest:". This use does not appear on the California supplemental label.
- m) For Apricots, Nectarines, and Peaches(30), in the Rate of Application, delete "West Coast- do not use more than 6 bags per acre". That limitation applies nationwide and already appears in the Notes for this crop.
- n) For Barley, Oats, Rye, and Wheat, for Army Cutworm replace the current Method of Application with "Apply when small larvae are readily found in the field. For aerial application, apply in 2 gallons of crop oil per acre.".
- o) For Blueberries, revise the Rate of Application to read "2 quarts per acre in 300 gallons of water".
- p) Correct the crop name to read "Brussels Sprouts".
- q) For Carrots, in the Method of Application revise "Make applications" to "Make application", since only one application is permitted per year.
- r) For Celery(4), in the Method of Application revise "Make applications" to "Make application", since only one application is permitted per year.
- s) For Cherries, add the missing headings Insects Controlled, Rate of Application, and Method of Application. For Peachtree Borers and Lesser Peachtree Borers, should a maximum number of quarts entry appear in the Rate of Application as it does for control of these same pests on Plums and Prunes? Such a modified entry would then read "1 quart per 100 gallons or 2 2/3 to 3 1/3 quarts per acre". Also in the Rate of Application, revise "West Coast:" to "Pacific Northwest:". This use does not appear on the California supplemental label. Revise the Method of Application for Peachtree Borer and Lesser Peachtree Borer to read "Best control is obtained with a single application post-harvest during the first week of September. Spray all bark areas from ground level to lower scaffold limbs.".

- t) For Cherry, Peach, Plum Nursery Stock Dip, the full set of personal protective clothing is also required for this use. To clarify this to users, add to the Note "Full Personal Protective Equipment (PPE) requirements for applicators also apply to this dipping operation.".
- u) For Collards, in the Method of Application revise "Make applications" to "Make application", since only one application is permitted per year. In the Notes, revise "one applications" to "one "application".
- v) For Grapes, in the Note revise "severe injury" to "severe plant injury".
- w) For Kale, in the Method of Application revise "Make applications" to "Make application", since only one application is permitted per year.
- x) For Lettuce, in the NOTES revise "(i.e., 1 1/3 quarts)" to read "(i.e., 4 quarts)".
- y) For Pears, revise the Method of Application for Pear Leaf Blister Mites to read "Apply to trees as a post harvest or dormant treatment.".
- z) For the crops Plums and Prunes, combine Peachtree Borers and Lesser Peachtree Borers as a single block entry (as you have for Apricots, Nectarines, and Peaches) with a revised Method of Application reading "Best control is obtained with a single application post-harvest during the first week of September. Spray all bark areas from ground level to lower scaffold limbs.". The combined pests entry will have a Rate of Application of "1 quart per 100 gallons or 2 2/3 to 3 1/3 quarts per acre." plus the reduced rate which is currently indicated as "West Coast-". However, revise "West Coast-" to "Pacific Northwest:". This lower rate option will also appear on the California supplemental label.
- aa) For Spinach, in the Method of Application revise "Make applications" to "Make application", since only one application is permitted per year.
- bb) For Strawberries, based on your Thiodan Cottonseed Oil product (the old linear version California label), it appears that the Rate of Application entry for this 3EC product should be expanded to the following: "2/3 quart per 100 gallons or 1 1/3 quarts per acre (Apply in a minimum of 150 gallons of water per acre.)". Please check with your agricultural experts and revise the label accordingly. If

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such a revision is <u>not</u> appropriate, please promptly notify the Agency in writing citing the reason(s). Also, for Cyclamen Mites revise the Rate of Application to read "2 2/3 quarts per acre in 400 gallons of water".

- cc) For Strawberries Northwest Use Only, the full set of personal protective clothing is also required for this use. To clarify this to users, add to the Note "Full Personal Protective Equipment (PPE) requirements for applicators also apply to this dipping operation.".
- dd) For Tomatoes, in the Insects Controlled column, delete "Webworms (California only)". This pest will appear on the California supplemental label. Also, for Whitefly, revise the Rate of Application entry to read "2/3 quart per 100 or 200 gallons of water per acre".
- ee) For Walnuts, assuming that the rate for this use is the same for all of your endosulfan formulations (1 1/2 to 2 lbs. a.i: per acre), correct the Rate of Application to read "2 to 2 2/3 quarts per acre". In addition, should the Rate of Application entry actually be expanded? Based on your Thiodan Cottonseed Oil product (the old linear version California label), it appears that the Rate of Application entry for this 3EC product should be expanded to the following: "2 to 2 2/3 quarts per acre (Apply in a minimum of 150 gallons of water per acre.)". However, the directions on this 3EC label for other fruit and nut trees generally include a number of quarts per 100 gallons entry along with the maximum amount of quarts per acre. Based on this, it may be that the Rate of Application should be even further expanded to read "2/3 quart per 100 gallons or 2 to 2 2/3 quarts per acre (Apply in a minimum of 150 gallons of water per acre.)". Please check with your agricultural experts and revise the label accordingly. If neither such revision is appropriate, please promptly notify the Agency in writing citing the reason(s).
- 3. Submit three (3) copies of your final printed labeling before you release the product for shipment.

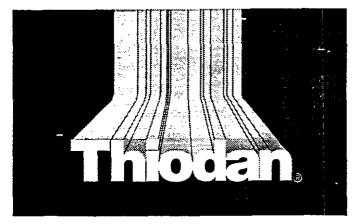
If these conditions are not complied with, the registration

will be subject to cancellation in accordance with FIFRA section 6(e). Your release for shipment of the product constitutes acceptance of these conditions.

Sincerely,

George T. LaRocca Product Manager 13 Insecticide/Rodenticide Branch Registration Division (7505C)1 Code 3212





3 EC 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

KEEP OUT OF REACH OF CHILDREN

DANGER-POISON DELIGRO

See Other Panels for Additional Precautionary Information.

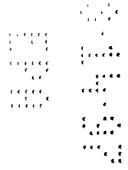
PRECAUCION AL USUARIO: Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detaile. (If you do not understand this label, find someone to explain it to you in detail.)

ACCEPTED
with COMMENTS
in EPA Letter Dated

NOV 1 3 1997

Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended, for the posticide registered under EPA Reg. No. 279-2924

FMC Corporation
Agricultural Products Group
Philadelphia PA 19103



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: Wash skin with soap and water.

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 antidate. 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.

PRECAUTIONARY STATEMENTS

Hazards to Humans (and Domestic Animals)

Danger

Fatal if swallowed. May be fatal if inhaled or absorbed through the skin. Do not breath 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 F on an EPA chemical resistance category selection chart.

Applicators and other handlers must wear: Coveralls over long-sleeved shirt and long pants; Chemical-resistant gloves, such as Barrier Laminate or Viton; Chemical-resistant footwear plus socks; Protective eyewear; Chemical-resistant headgear for overhead exposure; chemical-resistant apron when cleaning equipment, mixing, or loading; and a respirator with either an organic vapor-removing cartridge with a prefilter approved for pesticides (MSHANIOSH approval number prefix TC-23C), or a canister approved for pesticides (MSHANIOSH approval number 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.

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240 (d) (4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

8/97

^{*}Contzins Xylene Range Aromatic Solvents.
Thiodan 3 E.C. contains 3 pounds of endosulfan per gallon.

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 Acensy before analysis Tile Town Acensy before analysis. 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 flamer.

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 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. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

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 andlers of agricultural pesticides. It contains requirements for lining, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), 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 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

Coveralls over long-sleeved shirt and long pants; Chemical-resistant gloves, such as Barrier Laminate or Viton; Chemical-resistant footwear plus socks; Protective eyewear; and Chemical-resistant headgear for overhead exposure.

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 avoic excess heat. Carefully open containers. After panial use, replace lid and close tightly. Do not put concentrate or dilute materials into food or drink containers. Do not contaminate other pesticities, 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 RMC: 1 (800) 331-3148.

To confine spill: Dike surrounding area or absorb with sand, cat litter or commercial clay. Place damaged package in a kolding container, Identify contents.

Pesticide Disposal

Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray míxture, or rinsate 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 repre-sentative 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 wald motal contains not cut or weld metal containers.

Returnable/Refiliable Sealed Containers

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

See supplemental label for directions for use in California.

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 pesti-

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 Thiodane 3 E.C. insecticide used.

Do not plant root crops other than carrots, potatoes sweet potatoes, and sugar beets as follow-up crops. Observe days interval between last application and harvest indicated by number in () following the crop.

Apples (21)

Insects	Rate of	Method of
Controlled	Application	Application
Aphids (including Apple Aphid, Rosy Apple Aphid, Wooly Apple Aphid) Apple Rust Mite Green Fruitworm Tamished Plant Bug Tentiform Leafminers White Apple Leafhopper (first generation)	% quart per 100 gallons or a maxi- mum of 3% quarts per acre	Applications made at pink and or petal fall provide best control of Tarnished Plant Bug and Green Fruitworm. For best control of first generation White Apple Leafhopper, apply when nymphs first appear on leaves. If necessary, prior to petal fall, use 1 quart per 100 gallons to control Apple Aphids and Rosy Apple Aphids. For control of Tentiform Leafminers, make first application as soon as moth flight begins. A second application should be made 10 days later.

Do not feed pomace from treated apples to livestock.

Do not feed cult fruits to animals or allow livestock to graze in treated

Do not make more than 2 applications during the fruiting period.

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.

Apricots (21), Nectarines (21), Peaches (21)

Insects	Rate of	Method of
Controlled	Application	Application
Peachtree Borer Lesser Peachtree Borer	1 quart per 100 gai- lons; West Coast—1/5 to 1 quart per 100 gailons; South-eastern States—2 to 31/5 quarts per 100 gais.	Best control is obtained with a single application post-harvest during the first week of Sep- tember. Spray all back areas from ground level to lower scaffold limbs

Do not feed cull fruits to animals or allow livestock to graze in treated

orchards.

Do not make more than 2 applications per year.

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

Anticote (30) Nectarines (30) Peaches (30)

Insects	Rate of	Method of
Controlled	Application	Application
Aphids (including Black Cherry Aphid, Black Peach Aphid, Green Peach Aphid, Rusty Plum Aphid) Catfacing insects (Stink Bug type) Green Fruitworm Peach Silver Mite Peach Twig Borer	% quart per 100 gallons or a maxi- mum of 3% quarts per acre; West Coast—do not use more than 4 quarts per acre	Make applications when insects appear or feeding is noticed.

Do not feed cull fruits to animals or allow livestock to graze in treated orchards.

Do not make more than 2 applications per year.

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

-> see attached

Beans, succulent and Dry (except Lima Beans) (3) and Southern Field Peas (Succulent type, including Black-eyed Peas, Crowder Peas and Southern Peas) (3)

	(0)	
insects Controlled	Rate of Application	Method of Application
Black Bean Aphid Bean Leaf Skeletonizer Cowpea Curculio Cucumber Beetles Flea Beetles Green Stink Bug Leafhoppers Mexican Bean Beetle	% to 1% quarts per acre	Make applications when insects appear or feeding is noticed. For control of Cowpea Cufoution pake 3 applications at 5-day intervals starting when, the pods are ½ inchions.
Aphids Armyworms Western Bean Cutworm Whitefly	1 1/3 quarts per acre	* * * * * * * * * * * * * * * * * * * *

Do not feed treated threshings or allow livestockto graze in treated

Do not use on Lima Beans that are to be removed from the field for

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.

Blueberries

٠	Insects Controlled	Rate of Application	Method of Application
	Blueberry Bud Mite		Apply immediately after har- vest and repeat 6 to 8 weeks later.
	1 m		

Do not apply after buds are well formed.

Do not make more than 2 applications per year.
Do not exceed a maximum of 3.0 lbs. active ingredient (i.e., 4 quarts) per acre per year.

PLOCODII (1)* PLOSSEI STUC	iuts (14), Car	bbage (7), Caulmower (14)
insects Controlled	Rate of Application	Method of Application
Cabbage Aphid Cabbage Looper Cross-striped Cabbage- worm Diamondback Moth larvae Flea Beetles Harlequin Bug Imported Cabbageworm Leafhoppers Stink Bugs	1 to 11/5 quarts per acre	Make applications when insects appear or feeding is noticed.
Armyworms Cutworms Whitefly	11/3 quarts per acre	

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

insects Controlled	Rate of Application	Method of Application
Green Peach Aphid Leafhoppers	% to 1% quarts per acre	Make applications when insects appear or feeding is noticed.
Armyworms Fiea Beetles Whitefly	11/3 quarts per acre	-

Do not use tops for food or feed.

Do not make more than one application per year.

Do not exceed a maximum of 1.0 lbs. active ingredient (i.e., 11/2 quarts) per acre per year.

Barley, Oats, R	ve. Whea	t
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Insects Controlled	Rate of Application	Method of Application
Army Cutworm	⅔ quart per acre	For aerial application, apply in 2 gallons of dieset fuel oil per acre.
Cereal Leaf Beetle (Illinois, Indiana, Michigan and Ohio only)	1/3 to 3/3 quart per acre	Apply when small larvae are readily found in the field. For aerial application, use a minimum of 1 to 2 galons of water per acre.
Aphids	35 to 1 quart per acre	Make applications when insects appear or feeding is noticed.
Do not apply after heads begin to form. Do not feed treated forage to livestock. Do not make more than 2 applications per year. Do not exceed a maximum of 1.0 lb. active ingredient (i.e., 11/3 quarts) per acre per year.		

Celery (4)

Insects Controlled	Rate of Application	Method of Application
Green Peach Aphid Cabbage Looper Leafhoppers	% to 1% quarts per acre	Make applications when insects appear or feeding is noticed.
Armyworms Flea Beetles Whiteffy	11/3 quarts per acre	
Do not make more than	one application	per year.

Do not exceed a maximum of 1.0 lbs. active ingredient (i.e., 11/2 quarts)

per acre per year.

Celery (7)

Insects	Rate of	Method of
Controlled	Application	Application
Green Peach Aphid	⅔ quart per acre	Make applications when insects appear or feeding is noticed.

Do not make more than 2 applications per year.
Do not exceed a maximum of 1.0 lb. active ingredient (i.e., 11/3 quants)

per acre per year.

Cherries (21)

Peachtree Borer 1 reser Peachtree Borer	1 quart per 100 gal- ions; West Coast: 35 to 1 quart per 100 gallons	Thoroughly wet all bark from ground to scaffold limbs.	
Black Cherry Aphid Green Fruitworm Plum Rust (Nursery) Mite	% quart per 100 gailons or 2% to 3% quarts per acre	Make applications when insects appear or feeding is noticed.	
Pacific Northwest only: Eyespotted Bud Moth Fruittree Leafroller		For Bud Moth control, apply at "popcorn" stage. For Leaf- roller control, apply during pre- pink stage of growth.	
Michigan only: Mineola Moth	11/3 quarts per 100 gallons	Apply in the delayed dormant period.	

Do not feed cult fruits to animals or allow livestock to graze in treated orchards.

Do not make more than 2 applications per year. Do not exceed a maximum of 3.0 ibs. active ingredient (i.e., 4 quarts) per acre per year.

Cherry, Peach, Plum Nursery Stock Dip

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	Insects Controlled	Rate of Application	Method of Application
Peach	tree Borer	per 40	Mix thoroughly, Immerse trees so that the roots and crowns are covered well above the grafting bud scar.
Wear rubber gloves during the dipping operation. Plant immediately or dry before returning stock to storage.			

Citrus (Non-Bearing Trees and Nursery Stock).

Insects	Rate of	Method of
Controlled	Application	Application
Citrus Aphid	% quart per 100 gallons or a maxi- mum of 31/3 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

Do not make more than 2 applications per year. Do not exceed a maximum of 3.0 lbs. active ingredient (i.e., 4 quarts) per acre per year.

Collards (21)

insects Controlled _	Rate of Application	Method of Application
Aphids Cabbage Looper Diamondback Moth larvae Fail Armyworm Flea Beetles Harlequin Bug Imported Cabbageworm Leafhoppers	acre	Make applications when insects appear or feeding is noticed.
Whitefly	11/3 quarts per acre * *	

Do not make more than one applications ber'year.

Do not exceed a maximum of 1.0 lb. active ingredient (i.e., 11/3 quarts) per acre per year.

Cotton

Cotton		· ` ` ` ` ` ` ` ` ` ` ` ` ` ` ` ` ` ` `
insects Controlled	Rate of Application	Method 6i ^c Application
Aphids	½ to 1 quart per acre	Make applications wher insects appear or feeding is noticed. For control of aphids thorough coverage is important.
Boll Weevil	1/3 to 2 quarts per acre	
Boliworm Cabbage Looper Cotton Leafperforator Cotton Leafworm Fleahoppers Lygus Bugs Stink Bugs Tobacco Budworm	1% to 2 quarts per acre	
Thrips	2 quarts per acre	

Applications may be made using ground or aerial application equipment. The higher rate should be used under heavy pest pressure.

Do not apply after bolls open.

Do not graze dairy or meat animals in treated fields.

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

Cucumbers (2), Melons (2), Pumpkins (2), Summer and Winter Squash (2)

Insects Controlled	Rate of Application	Method of Application
Aphids Cucumber Beetles Melonworm Pickleworm Rindworm (on watermeions) Squash Beetle Squash By Squash Vine Borer Striped Flea Beetle	% to 1% quarts per acre	Make applications when insects appear or feeding is noticed. For Squash Vine Borer control, apply weekly to flower buds, stems, and vines beginning when moths first appear.
Cabbage Looper Omnivorous Leafroller Whitefly	11/5 quarts per acre	

Do not make more than 6 applications per year. Do not exceed a maximum of 3.0 lb. active ingredient (i.e., 4 quarts) per acre per year.

Eggolant (1)

Insects Controlled	Rate of Application	Method of Application
Blister Beetle Colorado Potato Beetle Flea Beetles Green Peach Aphid Green Stink Bug	35 to 115 quarts per acre	Make applications when insects appear or feeding is noticed.
Whitefly	11/3 quarts per acre	

Do not make more than 2 applications per year.

Do not exceed a maximum of 1.0 lbs. active ingredient (i.e., 11/4 quarts) per acre per year.

Grapes (7)

Insects	Rate of	Method of
Controlled	Application	Application
Grape Leafhopper Grape Phylloxera (leaf form) Rose Chafer	34 quart per 100 gallons or 114 to 2 quarts per acre	Make applications when insects appear or feeding is noticed.

Do not use on Concord variety as severe injury is likely to occur. Ground application is preferred.

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.

Kale (21)

Insects	Rate of	Method of
Controlled	Application	Application
Cabbage Flea Beetle Harlequin Bug Imported Cabbageworm		Make applications when insects appear or feeding is noticed.

Do not make more than one application per year.

Do not exceed a maximum of .75 lb. active ingredient (i.e., 1 quart) per acre per year.

Lettuce (14)

Insects Controlled	Rate of Application	Method of Application
Cabbage Looper Diamondback Moth larvae Green Peach Aphid Imported Cabbageworm Leafhoppers	1 to 11/2 quarts per acre	Make applications when insects appear or feeding is noticed.
Armywoms Whitefly	11/3 quarts per acre	_

On Head Lettuce: Do not make more than 3 applications after thinning. Remove wrapper leaves at harvest.

On Leaf Lettuce: Do not make more than 2 applications per year.

Do not feed crop refuse to livestock.

Do not exceed a maximum of 3.0 lbs. active ingredient (i.e., 11/2 quarts) per acre per year.

Mustard Greene (21)

Insects Controlled	Rate of Application	Method of Application
Aphids Cabbage Looper Diamondback Moth larvae Fall Armyworm Flea Beetles Harlequin Bug Imported Cabbageworm Leafhoppers	1 to 11/3 quarts per acre	Make applications when insects appear or feeding is noticed.
Whitefly	11/3 quarts per acre	

Do not make more than one application per year.

Do not exceed a maximum of 1.0 lb. active ingredient (i.e., 11/3 quarts) per acre per year.

Dages (7)

Pears (/)		
Insects Cöntrolled	Rate of Application	Method of Application
Green Fruitworm Tamished Plant Bug	% quart per 100 gallons or 2% to 3% irbárfs ger ocre	Make applications at white bud or potal fall when insects appear or feeding is noticed.
Pear Psylla	Ofsquars peracte	Apply in a minimum of 10 gallons of water for serial expli- cation of in 300 gallons of water in dilute explication of he application. Apply when adults are first observed or nympts are small and repeat to maintain control.
Pear Rust Mite Consperse Stink Bug (foliar treatment)	A quart per 100 gallons or 23 to 33 quarts per acre	Make applications when insects agreed or feeding is noticed. Skink Bugs must be wet by spray to obtain control.
Consperse Stink Bug (soil treatment)	34 quart per 100 gallons; 200 to 400 gallons per acre	Apply to orchard floor and around trees prior to bloom.
Pear Leaf Blister Mite	1/3 to 3/3 quart per 100 gallons	Apply as a post-hamest or dor- mant treatment.

Do not feed cull fruits to animals or allow livestock to graze in treated

Do not make more than 2 applications per year.

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

Note: Aerial application may not result in satisfactory control and should only be employed if impossible to apply by ground.

Pecans

insects Controlled	Rate of Application	Method of Application
Black Pecan Aphid Pecan Nut Casebearer Spittlebug	1 quart per 100 gallons	Make applications when insects appear or feeding is noticed. For Casebearer, apply when eggs at first generation appear on the tips of the young nuts. Another application may be required after the second generation of eggs is deposited. For Spittlebug, apply when first leaves are half grown and repeat as required.
Pecan Leaf Phylloxera	殆 to 1 quart per 100 gailons	Apply when nymphs appear and before they are enclosed in plant tissue. For high popu- lations, use the higher rate.

Do not apply after shuck split.

Do not graze livestock on orchard crops or grasses in treated areas.

Do not make more than 2 applications per year.
Do not exceed a maximum of 3.0 lbs. active ingredient (i.e., 4 quarts) per acre per year.

reppers (1)		
Insects Controlled	Rate of Application	Method of Application
Flea Beetles Green Peach Aphid Hornworms Pepper Maggot	⅔ quart per acre	Make applications when insects appear or feeding is noticed.

Do not make more than 2 applications per year.

Do not exceed a maximum of 1.0 lb. active ingredient (i.e., 11/5 quants)

per acre per year.

Peppers (4)

insects Controlled	Rate of Application	Method of Application
Armyworms Flea Beetles Green Peach Aphid Homworms Leafhoppers Pepper Maggot	1/3 to 11/3 quarts per acre	Make applications when insects appear or feeding is noticed.
Whitefly	11/3 quarts per acre	· · ·

Do not make more than 2 applications per year.

Do not exceed a maximum of 2.0 lbs. active ingredient (i.e., 2% quarts) per acre per year.

Pineapple (For Fresh Market Only) (7)

Insects Controlled	Rate of Application	Method of Application
Pineapple Fruit Mite	2 to 23/3 cuarts per acre	Make applications when insects appear or feeding is noticed. Apply at intervals of 7 to 10 days, if necessary, particularly during the 40 day period of blooming.
Do not teed torage or nic	eannle by-prod	ucts to livestock

Do not feed forage or pineappie by-products to investigation.
The not make more than 2 applications per year.
The not exceed a maximum of 3.0 lbs. active ingredient (i.e., 4 quarts) acre per year.

Plums (7), Prunes (7)

Insects Controlled	Rate of Application	Method of Application
Fruittree Leafroller (Pacific Northwest Only) Aphids (including Hop	34 quart per 100 gailons or 234 to 314 quarts per acre	Apply during pre-pink stage of growth when insects appear or feeding is noticed.
Aphid, Leafcurl Plum Aphid, Thistle Aphid) Plum Rust (Nursery) Mite		For control of aphids, apply when eggs hatch during pre- bloom or petal fall. Summer applications should be made before leaves curl.
Peach Twig Borer	% quart per 100 gallons or 2% to 3% quarts per acre	Make applications when insects appear or feeding is noticed.
Lesser Peachtree Borer	1 quart per 100 gai- lons or 2 ² / ₃ to 3 ¹ / ₃ quarts per acre	Apply spray to thoroughly wet the trunk and main branches.
Peachtree Borer	1 quart per 100 gallons or 2½ to 3½ quarts per acre. West Coast—½ to 1 quart per 100 gallons or 2½ to 3½ quarts per acre	Spray thoroughly to cover all bark areas from ground to scaffold limbs.

Do not allow livestock to graze on treated orchard crops or grasses in treated areas.

Do not make more than 2 applications per year. Do not exceed a maximum of 3.0 lbs. active ingredient (i.e., 4 quarts) per acre per year.

Potatoes (1)

Insects Controlled	Rate of Application	Method of Application
Aphids Armyworms Colorado Potato Beetle Green Stink Bug Leaffootted Bug Plant Bugs Potato Flea Beetles Potato Leafhopper Potato Tuberworm Threelined Potato Beetle	% to 1% quarts per acre	Make applications when insects appear, or feeding is noticed.
European Com Borer Potato Psyllid	1 to 11/3 , quarts per acre	, , , ,
False Chinch Bug Whitefly	11/3 quarts per acre	

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.

Spinach (21)

Insects Controlled	Rate of Application	Method of Application
Armyworms Crown Mite Flea Beetles Green Peach Aphid Leafhoppers	1 to 1½ quarts per acre	Make applications when insects appear or feeding is noticed.
Whitefly	11/3 quarts per acre	

Do not make more than one application per year. Do not exceed a maximum of 1.0 lb. active ingredient (i.e., 11/2 quarts) per acre per year.

Strawberries (4)

Stramuerries (4)	·	
Insects Controlled	Rate of Application	Method of Application
Meadow Spittlebug Strawberry Aphid Tamished Plant Sug Whitefly	1½ quarts per acre	Make applications when insects appear or feeding is noticed. Do not reapply within 15 days or more than twice during a 35 day period when fruit is present.
Cyclamen Mite	2% quarts per acre in 400 gallons	Make applications when insects appear or feeding is noticed. Thoroughly wet the foliage, stem and crown of the plant. For multiple applications, do not apply at intervals less than 35 days when fruit is present.

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,

Strawberries-Northwest Use Only

Insects	Rate of	Method of
Controlled	Application	Application
Garden Symphylan (aids in reducing damage)	1½ quarts per 100 gallons	Mix thoroughly. Dip entire plant. When immersing bundles of plants, make certain any trapped air is forced out to assure thorough wetting of entire plant.

Wear rubber gloves during the dipping operation. Drain and allow plants to dry before setting them out in the field

Sweet Corn (Fresh Vegetable Use Only) (1)

Insects Controlled	Rate of Application	Method of Application
Com Leaf Aphid Whitefly	1½ quarts per acre	Make applications when insects appear or feeding is noticed.
Com Earworm	2 quarts per acre	Apply when silks first appear and continue until they begin to dry. Allow 5 days between applications.

Do not apply to Sweet Corn to be processed. Do not feed treated forage or ensilage to livestock or allow livestock to

graze in treated fields...
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.

Sweet Potatoes (1)

Sweet Potatoes (1)			
Insects Controlled	Rate of Application	Method of Application	
Sweet Potato Flea Beetle Sweet Potato Weevil	35 quart per acre	Make applications when insects appear or feeding is noticed. For flea beetle control, begin applications shortly after transplanting or as soon as flea beetles appear. For Sweet Potato Weevil control, apply in sufficient water for complete coverage. Applications may be made to transplants in the nursery and/or in the field. Repeat applications may be made as necessary. For Sweet Potato Weevil control in a clean up program, apply at a rate of 2% quarts per acre to the soil under the sweet potato nursery beds and to the area immediately surrounding the nursery beds. Do not place the seed tubers directly on the ground treated with Thiodan®.	
Whitefly	11/3 quarts per acre	Make applications when insects appear or feeding is noticed.	
Banded Cucumber Beetle Larvae (aids in control) (South Central States and Puerto Rico Only)	11/3 to 23/3 quarts per acre broadcast or ½ to 1 quart per acre on a 16 inch band over the row (48 inch row spacing)	Work into the soil to a depth of approximately 3 inches. Treatment should be made just prior to plant set.	

Do not feed cull potatoes to livestock or allow livestock to graze in treated fields.

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.

Tobacco (5)

1004000 (0)		
Insects Controlled	Rate of Application	Method of Application
Aphids (including Green Peach Aphid, Tobacco Aphid) Budworm Cabbage Looper Flea Beetles Homworms	Seed Bed: % quart per 100 gailons	Make applications when insects appear or feeding is noticell, Apoly about 6 gallons of finished spray per 100 square yards.
Green June Bug larvae	Piárk 8€d: 34 pint per 190 gallons	Máke applications when insects appear or feeding is noticeli, Drench at a rate of 1 gallon per square yard.
Aphids (Including Green Peach Aphid, Tobacco Aphid) Budworm Cabbage Looper Flea Beetles Green June Bug larvae Homworms	Field: 1/3 to 11/3 quarts per acre	Make applications when insect activity of feeding is noticed.
Stink Bugs	Field: 3/4 quart per 100 gallons	

Do not make more than 6 applications per year.
Do not exceed a maximum of 3.0 lbs. active ingredient (i.e., 4 quasts) 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 Hormworms Webworm (California Only)	约 to 1岁 quarts per acre	Make applications whinsects appear or feeding noticed.
Cabbage Looper Stink Bugs	1 to 11/5 quarts per acre	
Tomato Fruitworm Tomato Russet Mite Whitefly Yellowstriped Armyworm	11/3 quarts per acre	
Whitefly	% quart per 100 to 200 gal- lons of water	

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

Walnuts

Insects	Rate of	Method of
Controlled	Application	Application
Walnut Aphid	2 to 31/s quarts per acre	Make applications when insects appear or feeding is noticed.

Do not apply after husk split.

Do not graze livestock on orchard crops or grasses in treated areas.

Do not make more than 2 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	Rate of	Method of
Controlled	Application	Application
Leatherleaf Fem Borer	绪 quart per 100 gallons	Begin treatment when first lar- val feeding is observed in the mid-vein area at the base of the leaflets. Repeat at inter- vals of 2 to 3 weeks as necessary.

per acre per year.

Ornamentals (Greenhouse, and Out-of-Doors)

Insects	Rate of	Method of
Controlled	Application	Application
Aphids Cyclamen Mite Rose Chafer Whitefly		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 Shoesmith", and "White Knight" chrysanthemums as injury may result.

Do not use on Birch trees.

t exceed a maximum of 3.0 lbs. active ingredient (i.e., 4 quarts) ps. acre per year.

Ornamental Trees and Shrubs

Dogwood, Lilac

* Insects	Rate of	Method of
Controlled	Application	Application
Dogwood Borer Lilac Borer	% to 11/3 quarts per 100 gallons (11/5-23/3 teaspoons per gallon)	Apply in early June and repeal 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 for Ornamentals, Nursery Stock or Christmas trees)— Pacific Northwest Only

Insects	Rate of	Method of
Controlled	Application	Application
Aphids Cooley Spruce Gall Adelgid Douglas Fir Needle Midge	% quart per 100 gallons (11/s tea- spoons 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 bucs 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	Rate of	Method of
Controlled	Application	Application
Zimmerman Pine Moth	100 gailons (2 teaspoons	Apply in mid-April and again, if necessary, in late fall. Thor- oughly 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	Rate of	Method of
Controlled -	Application	Application
Aphids	% quart per 100 gallons (11/2 tea- spoons per gallon)	Make applications when insects appear or feeding is noticed.

Food utensils such as teaspoons must not be used for (not 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.

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Spruce (New England Area Only)

Insects Controlled	Rate of Application	Method of Application (
Spruce Gall Aphid	% quart per 100 gallons (1% tea- spoons per gallon)	Apply in late April or parly May when aphids are present but before gails 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	好 quart per 100 gailons (1½ tea- spoons per gallon)	Make 3 to 5 applications beginning in mid-May. Thor- oughly spray foliage, twigs and bark.
Black Vine Weevil	1 1/3 quarts per 100 gallons (23/3 tea- spoons 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: PMC 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: Suyer'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.
—FMC Trademark

(3212-1/9/92-A)

533038 Pose 1313

NOV 1 3 1997

Ms. Nancy Hilton FMC Corporation Agricultural Products Group 1735 Market Street Philadelphia, PA 19103

Dear Ms. Hilton:

Subject: Amendment- Delete unsupported crops including

Alfalfa (grown for forage) (Artichokes,

Peas(seed crop), Safflower, Sugar Beets, and Sunflowers

Thiodan 3EC Insecticide (California label)

EPA Registration Number 279-2924

Your submission dated October 28, 1997

The amendment referred to above, submitted in connection with a registration under FIFRA section 3(c)(7)(a), is acceptable provided that you:

- Submit and/or cite all data or other material required for registration/reregistration of your product under FIFRA section 3(c)(5) or FIFRA section 4 when the Agency requires all registrants of similar products to submit such data.
- 2. Make the labeling changes listed below before you release the product for shipment bearing the amended labeling:
- a) At either the top of the label or directly under the product name add "Supplemental label for use in California" in large bold type.
- b) The crops uses not supported by data must be deleted from the label. Delete directions for Alfalfa (grown for forage), Artichokes, Peas(seed crop), Safflower, Sugar Beets, and Sunflowers.
- c) Add "Get medical attention." to the end of the If inhaled and If on skin advice in the Statement of Practical Treatment.

- d) At the end of the Note to Physicians, add "This formula contains petroleum hydrocarbons (xylene range aromatic solvent). Care should be taken to prevent aspiration because of the possibility of chemical pneumonia or pulmonary edema due to the organic solvent in the formulation.".
- e) Replace the current HAZARDS TO HUMANS AND DOMESTIC ANIMALS text with the following:

Fatal if swallowed. Corrosive. Causes irreversible eye damage. Do not get in eyes, on skin, or on clothing. May be fatal if inhaled or absorbed through skin. Do not breathe vapor or spray mist. Do not contaminate food or feed. Keep out of reach of domestic animals. Food utensils such as spoons and measuring cups must not be used for food purposes after use in measuring pesticides.

- f) In the Personal Protective Equipment (PPE) listing, for consistency with the rest of the entries, capitalize the "C" of "chemical-resistant apron", and the "R" of "respirator'.
- g) Add the heading Engineering Control Statement over the paragraph beginning "When handlers use closed systems".
- h) Add a third item to the USER SAFETY RECOMMENDATIONS as follows: "Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.".
- i) In the **Environmental Hazards**, after "...are important resources." add "Do not contaminate water by cleaning of equipment or disposal of equipment washwaters.".
- j) Replace "See supplemental label for directions for use in California", with "This product is intended for use in California under this supplemental label only. Be sure to read and follow the required procedures for reducing the risk of contamination of aquatic ecosystems in California". Then, relocate the California Supplemental Label section (leave off that heading and just begin the section with the heading "PROCEDURES FOR REDUCING RISK OF CONTAMINATION OF AQUATIC ECOSYSTEMS") from the back of the label to appear instead at the end of the GENERAL INSTRUCTIONS section.

You have indicated that FMC intends to split the California label out as a separate product, as AgrEvo has done. Once that separate California product has been registered, the referral statement on EPA Reg. No. 279-2924 (the all states except California Thiodan 3EC) should be modified to state "This product is not intended for use in

California. For California, use Thiodan 3EC Insecticide For Use in California. [or whatever name you choose for your new California-only 3EC product].

- k) For Apricots, Nectarines, and Peaches(30), in the Rate of Application column, delete "West Coast- do not use more than 4 quarts per acre". That limitation applies nationwide and already appears in the Notes for this crop.
- 1) For Barley, Oats, Rye, and Wheat, for Army Cutworm in the Method of Application add "Apply when small larvae are readily found in the field.". Delete the directions for control of Cereal Leaf Beetle in Illinois, Indiana, Michigan and Ohio from this California-only label.
- m) Correct the crop name "Brussels Sprouts".
- n) For Carrots, in the Method of Application revise "Make applications" to "Make application", since only one application is permitted per year.
- o) For Celery(4), in the Method of Application revise "Make applications" to "Make application", since only one application is permitted per year.
- p) For Cherries, delete the directions for control of Mineola Moth in Michigan from this California-only label.
- q) For Cherry, Peach, Plum Nursery Stock Dip, the full set of personal protective clothing is also required for this use. In the Notes, replace "Wear rubber gloves during the dipping operation" with "Full Personal Protective Equipment (PPE) requirements for applicators also apply to this dipping operation.".
- r) For Collards, in the Method of Application revise "Make applications" to "Make application", since only one application is permitted per year.
- s) For Cotton you may reduce the low rate for Boll Weevil control to 1/2 quart (i.e., the range will appear as 1/2 to 2 quarts per acre.
- t) For Grapes, in the first Note revise "severe injury" to read "severe plant injury".
- u) For Kale, in the Method of Application revise "Make applications" to "Make application", since only one application is permitted per year.

- v) For Pears, for Pear Leaf Blister Mite, revise the Method of Application to read "Apply to trees as a post harvest or dormant treatment.".
- w) For Pecans, revise the Rate of Application to read "1 quart per 100 gallons" rather than "1 quart per 100 acres".
- x) For Peppers (4), in the Notes revise "(i.e., 4 pounds)" to read "(i.e. 2 2/3 quarts)".
- y) For Plums and Prunes, combine Peachtree Borers and Lesser Peachtree Borers as a single block entry with a single revised Rate of Application of "2/3 to 1 quart per 100 gallons or 2 2/3 to 3 1/3 quarts per acre" [this is the "West Coast" rate] and a single Method of Application entry reading "Best control is obtained with a single application post-harvest during the first week of September. Spray all bark areas from ground level to lower scaffold limbs.".
- z) For Spinach, in the Method of Application revise "Make applications" to "Make application", since only one application is permitted per year.
- aa) For Strawberries, based on your Thiodan Cottonseed Oil product (the old linear version California label), it appears that the Rate of Application entry for this 3EC product should be expanded to the following: "2/3 quart per 100 gallons or 1 1/3 quarts per acre (Apply in a minimum of 150 gallons of water per acre.)". Please check with your agricultural experts and revise the label accordingly. If such a revision is not appropriate, please promptly notify the Agency in writing citing the reason(s). Also, for Cyclamen Mites revise the Rate of Application to read "2 2/3 quarts per acre in 400 gallons of water". In the Notes, revise "three (3) applications" to "3 applications" for consistency with the other Notes on this label.
- aa) For Strawberries Northwest Use Only, the full set of personal protective clothing is also required for this use. In the Notes, replace "Wear rubber gloves during the dipping operation." with "Full Personal Protective Equipment (PPE) requirements for applicators also apply to this dipping operation.".
- bb) For Sweet Corn, add the missing horizontal line between the entry for Corn Leaf Aphid and Whitefly and the entry for Corn Earworm.
- cc) For Tomatoes, in the Insects Controlled column, delete
 "(California only)" after "Webworm". Also, for Whitefly,

revise the Rate of Application to read "2/3 quart per 100 to 200 gallons of water per acre".

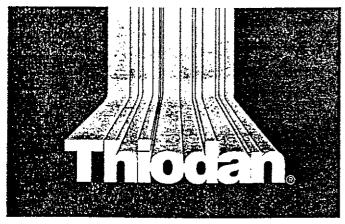
- dd) The other Commercially Grown Ornamentals directions include a 1 1/3 teaspoons per gallon rate, but none is included for Ornamentals (Greenhouse and Out-of-Doors). Is this omission intentional? If not, add the additional rate of "(1 1/3 teaspoons per gallon)" and in the Notes add "Food utensils such as teaspoons must not be used for food purposes after use in measuring pesticides.".
- ee) For Douglas Fir, in the Notes revise "tablespoons" to "teaspoons".
- ff) Delete the directions for use on Spruce (New England Area Only) from this California-only label.
- 3. Submit three (3) copies of your final printed labeling before you release the product for shipment.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6(e). Your release for shipment of the product constitutes acceptance of these conditions.

Sincerely,

George T. LaRocca Product Manager 13 Insecticide/Rodenticide Branch Registration Division (7505C)

Code 1593



3EC Insecticide

r Agricultural or Commercial Use Only

EPA Reg. No. 279-2924

EPA Est. 279-FL-1 (3); 279-IL-1 (8); 279-IA-1 (9) Superscript used is first letter of lot number stamped on container.

Active ingredient: By Wt.

*Endosulfan: (Hexachlorohexahydromethano-

 2,4,3-benzodioxathiepin 3-oxide)
 33.7%

 Inert Ingredients:
 63.3%

_

"Contains Xylene Range Aromatic Solvents.
Thiodan 3 E.C. contains 3 pounds of endosuitan per gallon.

KEEP OUT OF REACH OF CHILDREN

DANGER-POISON S

a 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 detaile. (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 colline 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: Wash skin with soap and water,

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

ACCEPTED
with COMMENTS
in EPA Letter Dated

NOV 1 3 1997

Under the Foderal Insecticide, Fungicide, and Rodenticide Act as amended, for the posticide registered under EPA Reg. No. 279-2924

Agricultural Products Group Philadelphia PA 19103

FMC

FMC Corporation

1205

Note to Physician: Endosulfan is a central nervous system stimulant absorbable by mouth, inhalation or through contact with skin, it may cause convuisions. There is no specific antidote, Diazzepam 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 convuisions 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.

PRECAUTIONARY STATEMENTS Hazards to Humans (& Domestic Animals)

Denger

Fatal if swallowed, May be fatal if inhaled or absorbed through the skin. Do not breath 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 F on an EPA chemical resistance category selection chart.

Applicators and other handlers must wear: Coveralls over long-sleeved shirt and long pants; Chemical-resistant gloves, such as Barrier Laminate or Viton; Chemical-resistant footwear plus socks; Protective eyewear; Chemical-resistant headgear for overhead exposure; chemical-resistant apron when cleaning equipment, mixing, or loading; and a respirator with either an organic vapor-removing cartridge with a prefilter approved for pesticides (MSHANIOSH approval number prefix TC-23C), or a canister approved for pesticides (MSHANIOSH approval number 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.

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240 [d] (4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

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 cicthing.

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 Tiffay 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.

-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 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. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

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

Thiodan 3 EC (California version)

Alfalfa (Grown for Engage) (71)

Insects	Rate of	Method of
Controlled	Application	Application
Meadow Spirtlebug	35 pirit per acre	Apply one week after eggs begin to hatch or when first small masses of froth are produced in the crowns of the plant which is usually about the time the alfalfa is 4 to 6 inches tall. Apply in a minimum of 10 gallons of water per acre by ground or 2 gallons of water per acre by air.

Do not graze or cut forage within 21 days of treatment. Do not apply more than once per cutting. Do not make more than 3 applications per year, Do not exceed a maximum of 0.75 ib. active ingredient (i.a., 1 quart) per

Apples (30)

acre per year.

Rate of Application	Method of Application
In quart per 100 gallons or a maximum of 3 1/3 quarts per acre	For best course of first generation Vihite Apple Leafhopper, upply when nymphs first appear on leaves. If necessary, prix to petal tall use 1 quart per 100 galfons to control Apple Athids and Rosy Apple Aphids.
	Application 2/3 quart per 100 gailons or a maximum of 3 1/3 quarts per

Do not make more than 2 applications per year.

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

Apricots (30), Nectarines (30), Peaches (30)

insects Controlled	Rate of Application	Method of Application
Aphids (Including Black Cherry Aphid, Black Peach Aphid, Green Peach Aphid, Rusty Plum Aphid) Cattacing insects (Stink Bug type) Peach Silver Mite Peach Twig Borer	⁹ / ₂ quart per 100 gallons or a maximum of 3 ½ quarts per acre; West Coast oo not use more than 4 quarts per acre.	Make applications when insects appear or feeding is noticed.

Do not feed cull fruits to animals or allow livestock to graze in treated orchards.

On not make more than 2 applications per year.

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

Artichokes (7)"

Insects	Rate of	Method of
Controlled Aphids (including Artichoke Aphid, Green Peach Aphid)	Application 1 to 1 /s quarts per acre	Application Make applications when insects appear or feeding is noticed Apply in a minimum of 20 galloos of water per acre by
Artichoke Plume Moth Whitefly	1 'A quarts per acre	ground and in a minimum of 10 gallons of water per acre by air.

Do not make more than 2 applications per year. Do not exceed a maximum of 2.0 lbs. active ingredient (i.e., 2 3/3 quarts) per acre per year.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFH part 170. This Standard contains recomments for the protection of agricultural workers on farms, forests, nusseness, 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 samements on this label about personal protective equipment (PPS), and relational entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

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:

Coveralls over long-sleeved shirt and long pants; Chemical resistant gloves, such as Barrier Laminate or Viton; Chemical-resistant tootwear plus socks; Protective eyewear, and Chemical-resistant headgear for overhead exposure.

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 pessicides, 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) 331-3748.

To confine spill: Dike surrounding area or absorb with sand, car licar or commercial clay. Place damaged package in a holding container, libertify contents

Pesticide Disposal

Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray moture, or rinsate 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 for 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/Refiliable Sealed Containers -

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

See supplemental label for directions for use in California.

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 frut 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

Do not plant root crops other than carrots, potatoes sweet potatoes. and sugar beets as follow-up crops. Observe days interval between last application and harvest indicated by number in () following the crop.

Thiodan 3 EC (California version) * Barley, Oats, Rye, Wheat

Insects Controlled	Rate of Application	Method of Application
Атту Симотп	分 quart per acre	
Cereal Leaf Beetle (Illinois, Indiana, Michigan and Chio onty)	1/3 to 3/3 quart per acre	Apply when small larvae are, readily found in the field. For aerial application, use a minimum of 1 to 2 gallons of water per acra.
Aphids (Including Russian Wheat Aphid)	1/3 to 1 quart per acre	Make applications when insects appear or feeding is noticed.

Do not apply after heads begin to form,

Do not feed treated forage to sivestock.

Do not make more than 2 applications per year.

Do not exceed a maximum of 1.0 lb, active ingredient (i.e., 1's quarts) per acre per year:

Beans, Succulent and Dry (except Lima Beans) (3) and Southern Field Peas (Succulent type, including Black-eyed Peas, Crowder Peas and Southern Peas) (3)

Insects Controlled	Rate of Application	Method of Application
Black Bean Aphid Bean Leaf Skeletonizer Cucumber Beetles Flea Beetles Green Stink Bug Leafhoppers Mexican Bean Beetle	² /s to 1 ¹ /s quarts per acre	Make applications when insects appear or feeding is noticed.
Aphids Western Bean Cutworm Whitefly	1 1/3 quarts per acre	

Do not feed treated threshings or allow livestock to graze in treated fields. Do not use on Lima Beans that are to be removed from the field for processing.

Do not make more than 3 applications per year.

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

Broccoli (7), Brussel Sprouts (14), Cabbage (7), Cauliflower (14)

Insects Controlled	Rate of Application	. Method of Applications
Cabbage Aphid Cabbage Looper Cross-striped Cabbageworm Diamondback Moth larvae Flea Beetles Harlequin Bug Imported Cabbageworm Stink Bugs	t to 1 1/3 quarts per acre	Make applications when insects appear or feeding is noticed.
Armyworms Cutworms Whitefly	1 1/3 quarts per acre	

Do not make more than 2 applications per year.
Do not exceed a maximum of 2.0 lbs, active ingredient (i.e., 2 % quarts) per acre per year.

Carrots (7)

Insects Controlled	Rate of Application	Method of Application
Green Peach Aphid	Thato 1 1/h quarts per acre	Make applications when insects appear or feeding is
Fea Beetles Whitefly	1 % quarts per acre	noticed.

Co not use toos for food or feed,

Co not make more than one application per year.

Do not exceed a maximum of 1.0 lb. active ingredient (i.e., 1 1/2 quarts) per acre per year

Calery (4)

Insects Controlled	Rate of Application	Method of Application
Green Peach Aphid Cabbage Looper	% to 1 % quarts per acre	Make applications when insects appear or feeding is
Fies Beetles Whitefly	1 % quarts per acre	noticed.

Do not make more than one application per year. Do not exceed a maximum of 1.0 lb, active ingredient (i.e., 1 '/a quarts) per acre per year.

Celery (7)

Insects Controlled **	Flate of Application	Method of Application
Green Peach Aphid	² s quart per acre	Make applications when insects appear or feeding is noticed.

Do not make more than 2 applications per year. Do not exceed a maximum of 1.0 lb. active ingredient (i.e., 1 1/s quarts) per acre per year.

Cherries (21)

Pate of Application	Method of Application
Visiquant per 100 gastons or	Make applications when insects appear or feeding is noticed.
2 % to 3 % quarts per acre	For Bud Moth control apply at "popcorn" stage. For Leafroller control, apply during pre-pink stage of growth.
1 h quarts per 100 gallons	Apply in the delayed dormant period.
	Application 2/3 quart per 100 gations or 2 1/4 to 3 "A quarts per acre 1 "/a quarts per 100

Do not seed cult truts to animals or allow livestock to graze in treated orchards.

Do not make more than 2 applications per year.

Do not exceed a maximum of 3.0 lbs. active ingredient (i.e., 4

Cherry, Peach, Plum Nursery Stock Dip-

quarts) per acre per year.

Insects	Rate of	Method of
Controlled	Application	Application
Peachtree Borer	per 40	Mix thoroughly, Immerse trees so that the roots and crowns are covered well above the grafting bud scar.

Wear nubber gloves during the dipping operation.
Plant immediately or dry before returning stock to storage.

Citrus (Non-Bearing Trees and Nursery Stock)

Insects	Rate of	Method of
Controlled	Application	Application
Citrus Aphid	2/3 quart per 100 gallons or a maximum of 3 1/3 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 2 applications per year.

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

Collards (21)

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Insects ·	Rate of	Method of
Controlled	Application	Application
Aphids Cabbage Looper Diamondback Moth larvae Flea Beetles Harlequin Bug Imported Cabbageworm Whitefly	1 quart per acre	Make applications when insects appear or feeding is noticed.

Do not make more than one application per year. Do not exceed a maximum of 0.75 lb. active ingredient (i.e., 1 quart) per acre per year.

Cotton

Insects Controlled	Rate of Application	Method of Application
Aphids	½ to 1 quart per acre	Make applications when insects appear or feeding is noticed. For control of
Boll Weevil	1/3 to 2 quarts per acre	aphids, thorough coverage is important.
Boltworm Cabbage Looper Cotton Leatperforator Fleahoppers Lygus Bugs Stink Bugs	11/3 to 2 quarts per acre	
Theips	2 quarts per acre	
Whitefly	1 1/z quarts per acre	

Applications may be made using ground or aerial application equipment.

The higher rate should be used under heavy pest pressure.

Do not apply after bolls open.

Do not graze meat or dairy animals in treated fields.

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

Thiodan 3 EC (California version) Cucumbers (2), Melons (2), Pumpkins (2), Summer and Winter Squash (2)

Insects Controlled	Pate of Application	Method of Application
Acnids Cucumber Beetles Mekonworm Pickleworm Rindworm (on watermelons) Squash Beetle Squash Bug Squash Vine Borer Striped Flea Beetle	^{2/} 3 to 1 ¹ /3 quarts per acre	Make applications when insects appear or feeding is noticed. For Squash Vine Borer control, apoly weekly to flower buds, stems, and vines beginning when moths first appear.
Cabbage Looper Omniverous Leatroller Whitelity	1 1/3 quarts per acre	

Do not make more than 3 applications per year. Do not exceed a maximum of 3.0 lbs. active ingredient (i.e. quarts) per acre per year.

Eggplant (1)

Insects Controlled	Rate of Application	Method of Application
Blister Beetle Colorado Potato Beetle Flea Beetles Green Peach Aphid Green Stink Bug*	² rs to 1 ¹ /s pints per acre	Make applications when insects appear or feeding a noticed.
Whitefly	1 1/3 pints per acre	

Do not make more than 2 applications per year. Do not exceed a maximum of 0.5 lb, active ingredient (i.e., 1 1/3 pints) per acre per year,

Grapes (7)

Insects	Rate of	Method of
Controlled	Application	Application
Grape Leafhopper Grape Phylloxera (leaf form) Rose Chafer	1/3 quarts per 100 gailons or 1 1/3 to 2 quarts per acre	Make applications where insects appear or feeding so noticed.

Do not use on Concord variety as severe injury is takely to occur Ground application is preferred. Do not make more than 3 applications per year.

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

Kale (21)

Insects	. Rate of	Method of
Controlled	Application	Application
Cabbage Flea Beetle Harlequin Bug Imported Cabbageworm	1 quart per acre	Make applications when insects appear or feeding is noticed.

Do not make more than one application per year, Do not exceed a maximum of 0.75 lb. active ingredient (i.e., t quart) per acre per year.

Thiodan 3 EC (California version)

Lettuce (14)

Insect Controlled	Plane of Application	Method of Application
Calibage Exoper Diamonoback Moth Isnaee Green Pasco Aphid Imported Calibageworm	1 to 1 1/h quarts per acre	Make applications when insects appear or feeding is noticed.
Whitely	1 % quarts per	

On Head Emisor: Do not acceed 3 applications after thinning, Remove

wrapper leaves at harvest. On Leaf Catuos: Do not make more than 2 applications per year.

Od not lead drop refuse to livestock.

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

Mustard Greens (21)

Insects	Rate of	Method of
Controlled	Application	Application
Aphids Cabbage Emper Diamonobach Moth Jarvae Flea Beetles Harkequen 3ug Imported Cabbageworm Whitefly	1 quart per acre	Make application when insects appear or feeding is noticed.

Do not make more than one application per year.

On not exceed a maximum of 0.75 to active ingredient (i.e., 1 quart) per acre per year.

Pears (7)

Flate of Application	Method of Application
3 'ri quarts per acre	Apply in a minimum of 10 gallons of water for aerial application or in 300 gallons of water for dilute application. Apply when adults are first observed or nympts are small and repeat to maintain control.
45 quart per 100 gallons or 2 25 to 3 1/5 quarts per acre	Make applications when insects appear or feeding is noticed. Stink Bugs must be wet by spray to obtain control.
² /s quart per 100 gallors; 200 to 400 gallors per acre	Apply to orchard floor and around trees prior to bloom.
1/3 to 7/3 quant per 100 gallers	Apply as a post harvest or dormant treatment.
	Application 3 'ri quarts per acre 4/4 quart per 100 galors or 2 ½ to 3 ½ quarts per acre 4/4 quarts per acre 4/4 quarts per acre 1/4 to 4/4 quart per 100 100

Do not feed cull fruits to animals or allow livestock to graze in treated orchards.

Do not make more than 2 applications per year.

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

Note: Aeral application may not result in satisfactory control and should only be exployed if impossible to apply by ground.

Peas (Seed Crop Only) (1)

	- 77 (-7	
insects Controlled	Flate of Application	Method of Application
Pea Aprid Pea Week	र्थत श quart per acre	Make applications when insects appear or feeding is noticed.

Use only on peas to be harvested by combine.

Do not feed treated vines or threshings to livestock or allow livestock to graze in tressed fields.

Do not make more than 2 applications per year.

Do not exceed a maximum of 1.5 lbs. active ingredient (i.e., 2 quarts) per scue ber Assu

Pecans

Insects	Rate of	Method of
Controlled	Application	Apolication
Black Pecan Aphid Pecan Nut Casebearer Spittlebug	1 quart per 100 acres	Make applications when insects appear or feeding is noticed. For Casebearer, apply when eggs of first generation appear on the tips of the young nuts. Another application may be required after the second generation of eggs is deposited. For Spittlebug, apply when first leaves are half grown and repeat as required.

Do not apply after shuck split.

Do not graze livestock on orchard crops or grasses in treated areas.

Do not make more than 2 applications per year.

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

Peopers (1)

Insects	Rate of	Method of
Controlled	Application	Application
Flea Beetles Green Peach Aphid Hornworms Pepper Maggot	² / ₃ quart per acre	Make applications when insects appear or feeding is noticed.

Do not make more than 2 applications per year.

Do not exceed a maximum of 1.0 lb. active ingredient (i.e., 1 1/s quarts) per acre per year.

Peppers (4)

Insects Controlled	Rate of Application	Method of Application
Flea Seetles Green Peach Aphid Hornworms Pepper Maggot	² / ₃ to 1 ¹ / ₃ quarts per acre	Make applications when insects appear or feeding is noticed.
Whitefly	i '/a quarts per acre	

Do not make more than 2 applications per year: Do not exceed a maximum of 2.0 lbs, active ingredient (i.e., 4 pounds) per acre per year.

Pineapple (For Fresh Market Only) (7)

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Insects Controlled	Rate of Application	Method of Application
Pineapple Fruit Mite	2 to 2% quarts per acre	Make applications when insects appear or feeding is noticed. Apply at intervals of 7 to 10 days, if necessary, par-licularly during the 40 day period of blooming.

Do not feed forage or pineapple by-products to livestock.

Do not make more than 2 applications per year.

Do not exceed a maximum of 3.0.1bs, active ingredient (i.e., 4 quarts) per acre per year.

Plums (7), Prunes (7)

riums (1), Francis (1)		
Insects Constilled	Rate of Application	Method of Application
Fruittree Learruler (Pacific *forthwest Only)	to 3 1/s quarts	Apply during pre-pink stage of growth when insects appear or feeding is noticed.
Aphids (reducing Hoo Acrid, Leafcur Plum Aphid, Thistle Aphid) Plum Russ (Nursery) Mite	per acre	For control of aphids, apply- when eggs hatch during pre- bloom or petal fall. Summer applications should be made before leaves curt.
Peach Twg Sorer	4/3 quart per 100 gailons or 2 4/3 to 3 1/3 quarts per acre	Make applications when insects appear or feeding is noticed.
Lesser Psacritree Borer	1 quart per 100 gallons or 2 ² / ₃ to 3 ¹ / ₃ quarts per acre	Apply spray to thoroughly wet the trunk and main branches.
Peachtree 3orer	1 quart per 100 gallons or 2 ½ to 3 ½ quarts per acre; West Coast—2½ to 1 quart per 100 gallons or 2 ½ to 3 ½ quarts per acre	Spray thoroughly to cover all bark areas from ground to scaffold limbs.

Do not allow livestock to graze on orchard crops or grasses in treated

Do not make more than 2 applications per year.

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

Potatoes (1)

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Insects Controlled	Rate of Application	Method of Application
Aphids Armywoms Colorado Potatio Beetle Green Shirk Bug Leaflootad Bug Plant Bugs Potato Fiea Beetles Potato Leafhopper Potato Tuberworm Threefined Potatin Beetle	2/s to 1 1/s quarts per acre	Make applications when insects appear or feeding is noticed.
European Com Borer Potato Psyllid	1 to 1 1/3 quarts per acre	
False Chinch Bug Whitefly	1 1/3 quarts per acre	

Do not make more than 8 applications per year. Do not exceed a maximum of 3.0 lbs. active ingredient (i.e., 4 quarts) per acre per year.

Sattlower

Insects Controlled	Rate of Application	Method of Application
Green Peach Aphid Whitefly	11/3 quarts per acre	Make applications when insects appear or leeding-is noticed.
Do not apply after flo	wer heads open.	

Do not make more than 2 applications per year. Do not exceed a maximum of 2.0 lbs, active ingredient (i.e., 22/3 quarts) per acre per year.

Spinach (21)

insects	Rate of	Method of
Controlled	Application	Application
Crown Mite Flea Beetles Green Peach Aphid Whitefly	1 quart per acre	Make applications when insects appear or feeding is noticed.

Do not exceed a maximum of 0.75 lb, active ingredient (i.e., 1 quart) per acre per year.

Strawberries (4)

Insects Controlled	Rate of Application	Method of Application
Mascow Spittlebug Strawderry Achid Tarnished Plant Bug Whiteity	1 % quarts per acre	Make applications when insects appear or feeding is noticed. Do not reapply within 15 days or more than twice during a 35 day period when fruit is present.
Cyclamen Mite	2 ² /3 quarts per acre in 400 gallons	Make applications when insects appear or feeding is noticed. Thoroughly wet the foliage, stem and crown of the plant. For multiple applications, do not apply at intervals less than 35 days when fruit is present.

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

Strawberries-Northwest Use Only

Insects	Rate of	Method of
Controlled	Application	Application
Garden Symphytan (aids in reducing damage)	1 1/3 quarts per 100 gallons	Mix thoroughly. Dip entire plant, When immersing bundles of plants, make certain any trapped air is forced out to assure thorough wetting of entire plant.

Wear rubber gloves during the dipping operation. Drain and allow plants to dry before setting them out in the "eld.

Sugar Beets (30)

Insects Controlled	Rate of Application	Method of - Application
Green Peach Aphid Meadow Spittlebug	²/s to 1 ¹/s quarts per acre	Make application(s) when insects appear or feeding is noticed. Make one or two applications per year as needed for control.
Sugar Beet Webworm	1 to 1 1/3 quarts per acre	
Whitefly	1 1/3 quarts per acre	

Do not feed treated tops to livestock.

Do not make more than 2 applications per year.

Do not exceed a maximum of 2.0 lbs. active ingredient (i.e., 2 3/3 quarts) per acre per year.

Sunflowers (1)

Insects	Hate of	Method of
Controlled	Application	Application
Sunflower Moth	1 1/3 quarts per acre	Make applications when insects appear or feeding is noticed. Make the first application at the onset of boom. Allow 7 days between repeat applications.

Do not feed treated forage to livestock.

Do not make more than 3 applications per year.
Do not exceed a maximum of 3.0 ibs, active ingredient (i.e., 4 quarts) per acre per year.

Sweet Corn (Fresh Vegetable Use Only) (1)

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Insects Controlled	Rate of Application	Method of Application
Corn Leaf Aphid Whitefly	1 /s quarts per acre	Make applications when insects appear or feeding is noticed.
Corn Earworm	2 quarts per acre	Apply when silks first appear and continue until they begin to dry. Allow 5 days between applications.

Do not apply to Sweet Corn to be processed. Do not feed treated forage or ensitage to livestock or allow livestock to graze in treated fields..

Do not make more than 3 applications per year.
Do not exceed a maximum of 3.0 ibs. active ingredient (i.e., 4 quarts) per

Thiodan 3 EC (California version)

Sweet Potatoes (1)

Insects	Rate of	Method of
Controlled	Application	Application
Sweet Potato Flea Beetle Sweet Potato Weevil	² /s quart per acre	Make applications when insects appear or feeding is noticed. For field beetle control, begin applications shortly after transplanting or as soon as field beetles appear. For Sweet Potzto Weevil control, apply in sufficient water for complete coverage. Applications may be made to transplants in the nursery and/or in the field. Repeat applications may be made as necessary.

On not feed cuil potatoes to livestock or allow livestock to graze in treated fields.

Do not make more than 3 applications per year.

Do not exceed a maximum of 1.5 lbs. active ingredient (i.e., 2 quarts) per acre per year.

Tomatoes (Field and Greenhouse) (2)

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Insects Controlled	Rate of Application	Method of Application
Aphids Blister Beetles Colorado Potato Beetle Flea Beetles Tomato Hornworm Webworm (California Only)	² / ₃ to 1 ¹ / ₃ quarts per acre	Make applications when insects appear or feeding is noticed.
Cabbage Looper Stink Bugs	f to 1 1/5 quarts per acre	
Tomato Fruitworm Tomato Russet Mite Whitefly Yellowstriped Armyworm	1 1/3 quarts per acre	
Whitefly	² /s 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

Ornamentals (Greenhouse, and Out-of-Doors)

Insects	Flate of	Method of
Controlled	Application	Application
Aphids Cyclamen Mite Rose Chafer Whitefly	²/s 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 "Bonnaton Deluxe", "Fred Shoesmith", 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

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

Insects	Rate of	Method of
Controlled	Application	Application
Apnids Cocley Spruce Gail Adelgid Douglas Fir Needle Midge	2's quart per 100 gallons {1 '/s teaspoons per gallon)	Make acclications when insects appear or feeding is noticed. For control of gall adelgid, appty when white cottony lutis acpear. For control of needle midge, apply in late April or early Vay just before buds open.

Food utensis such as tablespoons 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	Rate of	Method of
Controlled	Application	Application
Aphids	先 quart per 100 gallons (1分 teaspoons per gallon)	Make applications when insects appear or feeding is noticed.

Food utensits such as leaspoons 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	Rate of	Method of
Controlled	Application	Apolication
Spruce Gall Aprild	callons	Apply in late Aprd or early May when aphids are present but before gails are brined.

Food utensils such as tablespoons must not be used for food purposes after use in measuring pesticides.

For portexing a maximum of 3.0 lbs active incredient (i.e., 4 quarts) per

Co 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 sellier 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.

FMC is a registered trademark of FMC Corporation

CA Revision 5/94 (3212-1/9/92-A)

2708 .3

CALIFORNIA SUPPLEMENTAL LABEL

PROCEDURES FOR REDUCING RISK OF CONTAMINATION OF AQUATIC ECOSYSTEMS

FOR CROP USES LISTED ON THE PRODUCT LABEL

Endosulfan may be a source of contamination in acuatic ecosystems as a result of run-off from agricultural land due to discharge of irrigation water or during periods of heavy rainfall.

To minimize the chance of aquatic impact, the following conditions must be met to allow endosulfan applications:

DIRECTIONS FOR USE (General)

IN ADDITION TO SPECIFIC INSTRUCTIONS UNDER DIRECTIONS FOR USE ON THE PRINCIPAL LABELS, THE FOLLOWING CONDITIONS MUST ALSO BE FOLLOWED FOR USE IN CALIFORNIA:

- Do not apply this product to fields during irrigation or irrigate for 72 hours following an application.
- Do not apply this product through any type of irrigation system.
- Do not apply more than 1.5 lbs. a.i./acre/application or more than 3.0 lbs. a.i./acre/season. (Orchard crops and strawberries exempted on rate/acre/application restriction).
- Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark.
- Do not apply by ground or air within a distance of 300 feet to natural bodies of water including lakes, ponds, streams and estuaries.

FOR DRIFT CONTROL

- All application equipment should be properly maintained and calibrated using appropriate carriers.
- Do not make aerial or ground applications during temperature inversions.
- Make aerial or ground applications when the wind velocity favors on-target product deposition (approximately 3 to 10 mph). Do not apply when wind velocity exceeds 10 mph. Do not discharge at a height of more than 10 feet above the crop or target.
- 4. For aerial applications a positive shutoff system shall be in place to control flow of liquid to spray nozzies as follows: each individual nozzie shall be equipped with a check valve and the flow controlled by a suckback device or a boom pressure release device; or each nozzie shall be equipped with a positive action valve.
- For aerial applications, the spray boom must be mounted on the aircraft so as to minimize drift caused by wing tip or rotor vortices. The working boom length must not exceed 75 percent of wing span or rotor diameter.
- Aircraft boom pressure shall not exceed 40 pounds per square inch.
- Aircraft nozzles shall be equipped with orifices directed backward parallel to the horizontal axis of the aircraft in flight.

Thiodan 3 EC (California version)

- 3 Aircraft nozzies shall not be equipped with any device or mechanism which would cause a sheet, cone, fan, or similar type dispersion of the discharged material except as otherwise provided.
- 9 Fixed wing aircraft and helicopters operating in excess of 60 mph shall be equipped with jet nozzles having an onfice not less than 1/16 inch in diameter (D-4 or larger).
- 10. Helicopters operating at 60 mph or less shall be equipped with nozzles having an orifice not less than 1/16 inch in diameter. A number 46 or equivalent whirtplate may be used.
- 11. For ground applications, equipment other than handguns shall be equipped with nozzles having an orifice not less than 1/16 inch in diameter or larger. Boom nozzles shall be operated at a boom pressure not to exceed 30 pounds per square inch.

READ CONTAINER LABEL FOR COMPLETE USE INSTRUCTIONS

ACCEPTABLE SITES FOR ENDOSULFAN APPLICATION

- FIELDS, WITH NO DRAINS, HAVING CONTAINMENT THROUGH BERMS (able to-hold irrigation water and normal rainwater), LEVEES AND NON-DRAINING CIRCULATIONS SYSTEMS.
- FIELDS WITH DRAINS, BUT DRAINAGE FLOWS TO SUMP, FARM POND, EVAPORATION POND OR RECIRCULATION SYSTEM WITHOUT DRAINAGE (uncontrollable overflow acceptable, e.g., 10 or 100 year flood). Only grower maintained recirculation systems without drainage are acceptable.
- FIELDS WITH SURFACE DRAINS THAT NATURALLY FLOW ONTO PASTURELAND OR FALLOW FIELDS THAT HAVE NO CHANNELED DRAINAGE AND ARE AT LEAST 300 FEET LONG.

UNACCEPTABLE SITES FOR ENDOSULFAN APPLICATION

- FIELDS DRAINING DIRECTLY INTO SURFACE WATERS SUCH AS STREAMS, RIVERS, LAKES, PONDS, MARSHES, BAYS, ESTUARIES, OR THE OCEAN.
- FIELDS DRAINING INTO SURFACE DRAINAGE DITCHES OR CANALS THAT FLOW DIRECTLY INTO SURFACE WATERS SUCH AS STREAMS, RIVERS, ŁAKES, PONDS, MARSHES, BAYS, ESTUARIES, OR THE OCEAN.
- ANY AND ALL FIELDS WITH SURFACE DRAINAGE PATTERNS IN THE MOSS LANDING DRAINAGE SYSTEM HAVING MAIN ARTERIES THAT DRAIN INTO THE ELKHORN SLOUGH (northern portion of Monterey County).
- 4. ANY AND ALL FIELDS WITH DRAINAGE PATTERNS IN THE SAN DIEGO CREEK DRAINAGE SYSTEM HAVING MAIN ARTERIES THAT DRAIN INTO NEWPORT BAY.

ALL APPLICABLE DIRECTIONS, RESTRICTIONS AND PRECAUTIONS ON THE EPA REGISTERED LABEL ARE TO BE FOLLOWED.

THIS LABELING MUST BE IN THE POSSESSION OF THE USER AT THE TIME OF PESTICIDE APPLICATION.