

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

OCT 26 1994

CHRISTINE A. DIVELY FMC CORP. ACG SPECIALTY PRODUCTS 1735 MARKET STREET PHILADELPHIA, PA. 19103

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OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES

Subject: Label Amendment Submission of 04/15/94 in Response to PR Notice 93-7 EPA Reg. No. 279-2822 THIODAN 2 PYRENONE 0.3-0.03 EC

Dear Registrant:

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

# WHAT THIS ACCEPTANCE MEANS:

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

# WHAT YOU NEED TO DO NEXT:

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

BEFORE selling or distributing any product bearing the final printed labeling
AND

**WITHIN one year from date of this acceptance.** 



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

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

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

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

Sincerely, Lin Tompkins, Deputy Chief **Registration Support Branch** Registration Division (7505W)

Attachment

# Code 3042 Thiodan 2 Pyrenone 0.3 - 0.03 EC

# Insecticide

For Agricultural or Commercial Use Only EPA Reg. No. 279-2822 EPA Est. No. 279-

### Active Ingredient

*Endosulfan (Hexachlorohexahdyrometh	ano-2,4,
3-benzodioxathiepin oxide)	
**Technical piperonyl butoxide	
Pyrethrins	
Xylene range aromatic solvent	
Inert Ingredients	
	100.00%

### \*Thiodan

\*\*Consists of 3.14% (butylcarbityl) (6-propylpiperonyl) ether and 0.43% of related compounds.

Contains 2 pounds Endosulfan, 0.03 pound Pyrethrins, and 0.3 pound piperonyl butoxide (Butacide) per gallon.

### KEEP OUT OF REACH OF CHILDREN WARNING

### AVISO

Si usted no entiende la etiqueta, busque a algulen para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

### STATEMENT OF PRACTICAL TREATMENT

If swallowed: Coll a physician or Poison Control Center immediately. If possible, vomiting should be induced under medical supervision. Drink one or two glasses of water and one (1) ounce of syrup of ipecac. If syrup of ipecac is not available, drink 1 or 2 glasses of water and induce vomiting by touching the back of the throat with finger. Do not induce vomiting or give anything by mouth to an unconscious person.

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

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

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

Note to Physician: Endosulfan is a central nervous system stimulant absorbable by mouth, inhalation, or through contact with skin. There is not antidote, but excitant effects can usually be controlled by barbiturates.

For Emergency Assistance Call (716) 735-3765

See other panels for additional precautionary information.

FMC Corporation Agricultural Chemical Group Philadelphia, PA 19103

### PRECAUTIONARY STATEMENTS

Hazards to Humans (and Domestic Animals) Warning:

May be fatal if swallowed, inhaled, or absorbed through skin. Causes moderate eye irritation. Avoid contact with skin, eyes, or clothing. Do not breathe vapor. Do not apply or allow to drift to areas occupied by unprotected humans or beneficial animals.

**Net Contents** 

### Personal Protective Equipment:

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

Applicators and other handlers must wear:

- · Coveralis over short-sleeved shirt and short 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
- A recpirator with either an organic vapor-removing cartridge with a prefilter approved for pesticides (MSHA/NIOSH approval number prefix TC-23C), or a canister approved for pesticides (MSHA/NIOSH 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.

Engineering Controls Statement: 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.

ACCEPTED Side COMMENTS To EPA Fatter Dated

OCT 26 1994 Under the Federal Insecticide, Fundicide, and Hadenticide Act As amended. for the preticide revisioned under EPA Ber. No. 279-2822

#### ENVIKONMENTAL HAZARDS

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

This product is toxic to bees a...d should not be applied when bees are actively visiting the area.

#### PHYSICAL/CHEMICAL HAZARDS

Do not use 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 through any type of irrigation system. 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.

### AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restrictedentry 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 short-sleeved shirt and short pants.
- Chemical-resistant gloves such as Barrier Laminate or Viton
- Chemical-resistant footwear plus socks
- Protective eyewear
- 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 lids and close tightly. Do not put concentrate or dilute material into food or drink containers. Do not contaminate other pesticides, fertilizers, water, food, or feed by storage or disposal.

In case of spill, avoid contact, isolate area and keep out animals and unprotected persons. Confine spills. Call FMC collect: (716) 735-3765.

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

#### **Container Disposal**

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

### ENDANGERED SPECIES RESTRICTIONS

The following restrictions apply to use of this product after February 1, 1988.

Before using this pesticide on corn, wheat, oats, barley, rye and/or cotton in the counties listed below, you must obtain the PESTICIDE USE BULLETIN FOR PROTECTION OF ENDANGERED SPECIES for the county in which the product is to be used. The bulletin is available from your County Extension Agent, State Fish and Game Office, or your pesticide dealer. Use of this product in a manner inconsistent with the PESTICIDE USE BULLETIN FOR PROTECTION OF ENDAN-GERED SPECIES is a violation of Federal laws.

#### Alabama

- Colbert, Greene, Jackson, Lamar, Lauderdale, Limestone, Madison, Marshall, Morgań, Pickens and Sumter
- Arizona
- Graham, Maricopa, Mohave, Pima, Pinal and Santa Cruz
- Arkansas Benton, Clay, Clark. Cross, Lawrence, Lee, Poinsette, Polk, Randolph, Sharp and St. Francis
- California

Butte, Colusa, Glenn, Imperial, Inyo, Kern, Los Angeles, Merced, Modoc, Orange, Riverside, Sacramento, San Bernardino, San Diego, Santa Barbara, Solano, Stanislaus, Sutter, Tehema, Ventura and Yolo Florida

Alachua, Baker, Bradford, Brevard, Broward, Charlotte, Citrus, Clay, Collier, Columbia, Dade, De Soto, Dixie, Duval, Flagler, Gadsden, Gilchrest, Glades, Hardee, Hendry, Hernando, Highlands, Hillsborough, Indian River, Jefferson, Lafayette, Lake, Lee, Leon, Levy, Madison, Manatee, Marion, Martin, Monroe, Nassau, Orange, Okeechobee, Osceola, Palm Beach, Pasco, Pinelfas, Polk, Putnam, St. Johns, St. Lucie, Sarasota, Seminole, Sumter, Suwannee, Taylor, Union, Volusia and Wakulia

Georgia

Brantley, Bryan, Bulloch, Burke, Camden, Candler, Charlton, Chatham, Effingham, Emanuel, Evans, Glascock, Glynn, Jefferson, Jenkins, Johnson, Liberty, Long, McIntosh, Pierce, Richmond, Screven, Ware, Washington and Wayne

Kansas Clark, Comanche, Meade and Stafford

Kentucky

Ballard, Butler, Edmundson, Green, Hart, Jackson, Laurel, Livingston, Marshall, McCracken, McCreary, Pulaski, Rockcastle, Taylor, Warren and Wayne

Mississippi

Claiborne, Copiah, Hinds, Itawamba, Lowndes, Monroe and Noxubee Missouri

Barry, Benton, Camden, Christian, Dallas, Greene, Hickory, Jasper, Lawrence, Miller, Newton, Osage, Polk, St. Clair. Stone and Webster. Montana

Garfield, McCone, Sheridan and Valley

Nebraska

- Boyd, Brown, Butfalo, Butler, Cass, Cedar, Colfax, Dawson, Dodge, Douglas, Hall, Hamilton, Holt, Howard, Kearney, Keya Paha, Knox, Merrick, Nance, Phetps, Platte, Polk, Rock, Sarpy and Saunders Nevada
- nevada - - Clark
- New Mexico

Chaves Debaca and Edity

North Carolina Edgecombe, Nash and Pitt



#### North Dakota

Benson, Bottineau, Burke, Burleigh, Divide, Dunn, Eddy, Emmons, Foster, Kidder, Logan, McHenry, McIntosh, McKenzie, McLean, Mercer, Morton, Mountrail, Nelson, Oliver, Pierce, Ramsey, Renville, Rolette, Sheridan, Sioux, Stutsman, Towner, Ward, Wells and Williams

## Ohio

Pickaway

#### Oklahoma

Delaware, McCurtain and Pushmataha Oregon

#### Lake

South Carolina

Aiken, Barnwell, Beaufort, Berkely, Charleston, Colleton, Dorchester, Georgetown, Hampton, Horry, Jasper and Marion South Dakota

Clay, Haakon, Hughs, Potter, Stanley, Sully, Union, Walworth, Yankton and Ziebach

#### Tennessee

Bedford, Blount, Claiborne, Decatur, Franklin, Hancock, Hardin, Hawkins, Hickman, Knox, Lawrence, Lincoln, Loudon, Marshall, Maury, Meigs, Monroe, Rhea, Roane, Scott, Sequatchie, Smith, Sullivan, Trousdale and Wayne

#### Texas

Aransas, Austin, Bastrop, Burleson, Cameron, Colorado, Comal, Fort Bend, Goliad, Harris, Hays, Jeff Davis, Pecos, Reeves, Refugio and Victoria

Utah Utah and Washington

Virginia

Lee, Russell, Scott, Smyth, Tazewell, Washington and Wise

#### Not For Use Or Storage In Or Around The Home.

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, unless otherwise noted, of listed crops. 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 finished spray per acre on vegetable and field crops, unless otherwise noted, and a minimum of 20 gallons of finished spray per acre on fruit and nut trees and on vines. Where more than 2 quarts of this material are recommended, mix with sufficient water to provide a minimum of finished spray equal to twice the amount of Thiodan\* 2 Pyrenone\* 0.3-0.03 EC insecticide used. Apply with continuous agitation.

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

Alfalfa, Grown for Forage (21): Spittlebug---Use 1 pint 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 alfalfa is 4 to 6 inches tall. Do not apply more than 1 application per cutting.

Apples (21): Apple Aphid, Rosy Apple Aphid—Use 1 qt. per 100 gals. or 4 to 5 qts. per acre. Do not make more than three applications during fruiting period. Do not feed pomace to livestock. Do not feed cull fruits to animals nor allow livestock to graze treated orchards.

Apples (30): Apple Aphid, Rosy Apple Aphid—Use 1 quart per 100 gallons or 4 to 5 quarts per acre. No limit on number of applications. Apple Rust Mite—Use 11/2 to 2 pints per 100 gallons or 6 to 8 quarts per acre. Do not apply more than twice during fruiting period. Do not feed pomace to livestock. Do not feed cull fruits to animals nor allow livestock to graze treated orchards.

Apples (Western Use): Apple Rust Mite—Use 1½ to 2 points per 100 gallons. Apple Aphid, Rosy Apple Aphid—Use 1 quart per 100 gallons. Woolly Apple Aphid –Use 1 quart per 100 gallons (8 quarts per acre). If 5 quarts or less are applied per acre may be applied within 30 days of harvest with no limit on number of applications; or if no more than 3 applications are made during the fruiting period do not apply within 21 days of harvest. Do not feed pomace from treated apples to livestock. If 5.1 to 8 quarts per acre are applied do not apply more than twice during the fruiting period not apply more than twice form treated apples to livestock. Do not feed pomace from treated apples to animals nor allow livestock to graze treated orchards.

Apricots (21), Nectarines (21): Peachtree Borer - Le 1½ quarts per 100 gallons. (Use 1 quart per 100 gallons in Western areas). Spray all bark areas from ground level to scattold limbs. Do not leed cull fruits to animals nor allow livestock to graze treated orchards.

Apricots (30), Nectarines (30): Calfacing Insect, Green Peach Aphid, Peach Twig Borer—Use 1 quart per 100 gallons or 4 to 5 quarts per

acre. Lesser Peachtree Borer-Use 1½ quarts per 100 gallons. Thorough wetting of trunk and main branches is important. Peach Silver Mile-Use 1 pint per 100 gallons or 4 to 5 quarts per acre. Do not make more than two applications during the fruiting period. Do not feed cult fruits to animals nor allow livestock to graze treated orchards.

Artichokes (7): Artichoke Aphid, Green Peach Aphid-Use 1% to 2 quarts per acre. Artichoke Plume Moth-Use 2 quarts per acre.

Barley, Oats, Rye, Wheat: Army Cutworm.--Use 1 quart per acre. Do not apply after heads begin to form. Do not feed treated forage to dairy animals or animals being finished for staughter. For Airplane Application, use 1 quart in 2 gallons diesel fuel oil per acre.

Beans, succulent and dry, except Lima Beans (3): Black Bean Aphid, Bean Leat Skeletonizer, Cucumber Beetle, Green Stink Bug, Mexican Bean Beetle, Western Bean Cutworm—Use 1 to 2 quarts per acre. Do not make more than 3 applications per season. Do not feed treated threshings to livestock or allow to graze in treated fields.

Blueberries: Blueberry Bud Mite-Use 3 quarts per acre in 300 gallons of water. Apply immediately after harvest and repeat 6 to 8 weeks later. Do not apply after buds are well formed.

Broccoll (7), Cabbage (7) Brussels Sprouts (14), Cauliflower (14): Cabbage Aphid, Cabbage Looper, Cross-Striped Cabbageworm, Diamondback Moth Larvae, Flea Beetle, Harlequin Bug, Imported Cabbageworm, Stink Bug-Use 1% to 2 quarts per acre. Armyworms, Cutworms---Use 2 quarts per acre.

Carrots (7): Green Peach Aphid—Use 1 to 2 quarts per acre. Do not apply more than 2 times per season. Do not use tops for food or feed.

Celery (7): Green Peach Aphid—Use 1 quart —or—Celery (4): Green Peach Aphid, Cabbage Looper—Use 1 to 2 quarts per acre. Do not exceed 3 applications.

Cherries (21): Black Cherry Aphid, Eyespotted Bud Moth (Pacific Northwest Only)—1 se 1 quart per 100 gallons. (4 to 5 quarts per acre). For Eyespotted Bud Moth, apply during "popcorn" stage of growth. Fruittree Leafroller (Pacific Northwest Only)—Use 1 quart per 100 gallons (4 to 5 quarts per acre). Apply during pre-pink stage of growth. Mineola Moth (Michigan Only)—Use 2 quarts per 100 gallons. (4 to 5 quarts per acre). Do not exceed 2 applications after shuck split. Do not feed cull fruits to animals nor allow livestock to graze treated orchards

Cherry, Plum and Peach Nursery Stock: Peachtree Borer—Use 1 gallon per 40 gallons of water. Mix thoroughly. Immerse the bundles of trees so that the roots and crowns are covered well above the grafting bud scar. If trees are not planted immediately allow to dry before returning them to storage. Wear-tubber gloves during the dipping-operation.

**Citrus—Non Bearing Trees and Nursery Stock.** Citrus Aphid---Use 1 pint per 100 gallons or 5 quarts per acre. Do not apply to bearing trees or trees that will bear fruit within 12 months. Shrimp and crab may be killed at application rates recommended on this label. Do not apply where these are important resources.

Collards (21): Cabbage Looper, Diamondback Moth Larvae, Harlequin Bug, Imported Cabbageworm-1½ qts. per acre. Do not exceed 1 application.

Corn, Sweet (Fresh Vegetable Use Only) (0): Corn Leaf Aphid—2 qts. per acre. Corn Earworrn—3 qts. per acre applied at 2 to 3 day intervals beginning when silks first appear and continuing until they begin to dry. Do not exceed 5 applications. Do not apply to sweet corn to be processed. Do not feed treated forage or ensilage to fivestock or allow fivestock to graze in treated fields.

**Corn, Seed Crop Only:** Corn Earworm—Use 2 to 3 quarts per acre. Direct spray to area of cornsilks. Corn Leaf Aphid—Use 2 quarts per acre. Do not use seed for food, feed, or oil purposes. Do not exceed 5 applications. Do not feed treated forage or ensilage to livestock or allow fivestock to graze in treated fields.

Cotton: Boll Weevil—Use 1 to 2% gts. per acre. Bollworm, Cabbage Looper, Cotton Leafperforator, Lygus Bugs, Stink Bugs—Use 2 gts per acre. Thrips—Use 3 gts. per acre. Do not apply after bolls open Do not graze meat or dairy animals in treated fields.

Cotton: Boll Weevil, Bollworm, Cabbage Looper, Cotton Lea: Inforator, Lygus Bugs, Stink Bugs—Use 1 to 1½ quarts per aci plus recommended amounts of one of the following: carbaryl, Gut. ion, malathion or methyl parathion. Do not graze dairy or meat animals in treated fields. Do not apply methyl parathion within 5 days or Guthion within one day of handpicking. May be used up to 25% of boll opening.

Cotton (Western Use): Boll Weevil--Use 1 to 3 quarts per acre. Bollworm, Cabbage Looper, Lygus Bugs, Stink Bugs, Cotton Leafperforator--Use 2 to 3 quarts per acre. Thrips -Use 3 quarts per acre. Do not apply after bolls open. Do not graze meat or dairy animals in treated fields. Do not feed treated plant parts to meat or dairy animals.

Cucumbers (0), Melons (0), Summer & Winter Squash (0): Aphids.



Cucumber Beetles, Squash Bug, Squash Vine Borer, Striped Cabbage Flea Beetle, Melonworm, Pickleworm, Squash Beetle, Rindworm (Watermelon)—Use 1 to 2 quarts per acre. For Squash Vine Borer control, apply weekly to flowerbuds, stems and vines beginning when moths first appear. Cabbage Looper (melons), Omnivorous Leafroller (melons)—Use 2 quarts per acre

Eggptant (1): Blister Beetle, Colorado Potato Beetle, Flea Beetles, Green Peach Aphid, Green Stick Bug, Whitefly—Use 1 quart per acre. Do not exceed 0.5 lbs. active ingredient endosulfan per acre.

Grapes (7): Grape Leafhopper, Rose Chafer—Use 1 quart per 100 gallons or 2 to 3 quarts per acre. Do not apply to Concord variety as severe injury is likely to occur.

Kale (21): Cabbage Flea Beetle, Harlequin Bug, Imported Cabbageworm-Use 1% quarts per acre. Do not exceed one application.

Lettuce (14): Cabbage Looper, Diamondback Moth Larvae, Green Peach Aphid, Imported Cabbageworm---Use 1% to 2 quarts per acre. On Head Lettuce do not make more than 3 applications after thinning. Remove outside leaves at harvest. Do not feed crop waste to livestock. On Leaf Lettuce do not apply more than 2 applications per season.

Macadamia Nuts (0): Southern Green Stink Bug-Use 2 quarts per 100 gallons. Do not graze livestock on orchard crops or grasses in treated areas.

Mustards Greens (21); Turnip Greens (21): Aphid, Cabbage Looper, Imported Cabbageworm—Use 11/2 quarts per acre. Do not exceed one application. Do not apply to turnips grown for roots.

Peaches (30): Black Cherry Aphid, Black Peach Aphid, Catfacing Insects, Green Peach Aphid, Peach Twig Borer, Rusty Ptum Aphid—Use 1 qt. per 100 gals. or 4 to 5 qts. per acre. Lesser Peachtree Borer— Use 3 pts. per 100 gals. Thorough wetting of trunks and main branches is important. Peach Silver Mite—Use 1 pt. per 100 gals. or 4 to 5 qts. per acre. Do not exceed 2 applications during fruiting period. Do not feed cull fruits to animals nor allow livestock to graze treated orchards.

Peaches (21): Peachtree Borer—Use 1½ quarts per 100 gallons (1 quart per 100 gallons in Western areas). Spray all bark areas from ground level to scaffold timbs. (See under "Cherries" for nursery stock dip treatment). Do not feed cull fruits to animals nor allow livestock to graze treated orchards.

Pears (7): Consperse Stink Bug—Ground treatment, use 1 quart per 100 gallons, 200 to 400 gallons per acre applied to orchard floor and ground around trees prior to bloom. Do not graze livestock in treated orchards. Foliar treatment: Use 1 quart per 100 gallons or 4 to 5 quarts per acre. Stink bugs must be wet to obtain control. Pear Rust Mite— Use 1 quart per 100 gallons or 4 to 5 quarts per acre. Pear Leaf Blister Mite—Use 1 to 2 pints per 100 gallons applied as a post-harvest or dormant treatment. Do not exceed 2 applications during the fruiting period. Second Generation Pear Psylla—Use 3 pints per 100 gallons of water, not to exceed 330 gallons of spray per acre. Apply when nymphs are still small and repeat if necessary in 7 to 10 days. Do not apply more than 2 applications during the fruiting period. Do not feed cull fruits to animals nor allow livestock to graze treated orchards.

Peas (Grown for seed only): Pea Aphid, Pea Weevil—Use 1 to  $1\frac{1}{2}$  quarts per acre. Do not exceed 2 applications during the fruiting period. Use only on peas to be harvested by combine. Do not feed treated vines to livestock or allow livestock to graze in treated fields.

Peas (Succutent) (5): Pea Aphid, Pea Weevil--Use 1 to 2 quarts per acre. Co not exceed 2 applications during the fruiting period. Use only on peas to be harvested by combine. Do not feed treated vines to livestock or allow livestock to graze in treated fields.

Peas, Southern Field (Succulent type, including Black-eyed Peas, Crowder Peas, and Southern Peas) (3): Cowpea Curculio—Use 1 to 2 quarts per acre. Make 3 applications at 5 day intervals starting when pods are ½ inch long. Do not feed treated threshings to livestock or allow livestock to graze in treated fields.

Pecans: Black Pecan Aphid—Use 1½ quarts per 100 gailons. Do not apply after shuck split. Do not graze meat or dairy animals in treated groves. Do not graze livestock on orchard crops or grasses in treated areas

Peppers (4)\*: Green Peach Aphid, Flea Beetles, Hornworms, Pepper Maggot-Use 1 to 2 quarts per acre. "One day if maximum of 1 quart per acre is applied

Pineapples (For Fresh Market Only) (7): Pineapple Fruit Mite--Use 1 gallon per acre. Apply at intervals of 7 to 10 days if necessary, particularly during the 40-day period of blooming. Do not make more than 4 applications. Do not feed treated forage or pineapple by-products to fivestock.

Plums (7). Prunes (7): Fruitiree Leaf Roller (Pacific Northwest Only) -Use 1 quart per 100 gallons. Apply during pre-pink stage of growth Hop Aphid. Leaf Curl Plum Aphid, Plum Nursery Mite, Thistle Aphid-Use 1 quart per 100 gallons or 4 to 5 quarts per acce. For Aphids, apply when eggs hatch during pre-bloom or petal fall. Summer applications should be made before leaves curl. Lesser Peachtree Borer--Use 3 pints per 100 gallons or 4 to 5 quarts per acce. Apply spray to thoroughly well trunks and main branches. Peachtree Borer--Use 3 pints per 100 gallons. (Use 2 to 3 pints in Western Areas). Spray thoroughly to cover all bark areas from ground to scalfold limbs. Do not use more than 5 quarts per acre. (See under "Cherries" for nursery stock dip treatment for Peachtree Borer.) Do not feed cull fruits to animals nor allow livestock to graze treated orchards.

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Potatoes (0): Aphids, Armyworms, Colorado Potato Beetle, Green Stink Bug, Leaffooted Bug, Plant Bugs, Potato Flea Beetle, Potato Leafhopper, Potato Tuberworm, Whitefly--1 to 2 qts. per acre. European Corn Borer, Potato Psyllid--1% to 2 qts. per acre. False Chinch Bug-2 qts. per acre. Threefined Potato Beetle--1 qt. per acre.

Potatoes (Western Use) (0): Aphids, Armyworms, Colorado Potato Beetle, Green Stink Bug. Leaffooted Bug, Plant Bugs, Potato Flea Beetle, Potato Leathopper, Potato Tuberworm, Whitefly, Threelined Potato Beetle—Use 1 to 2 quarts per acre. European Corn Borer, Potato Psyllid—Use 1 ½ to 2 quarts per acre. False Chinch Bug—Use 2 quarts per acre.

Pumpkins (1): Aphids—1 qt. per acre. Cucumber Beetles, Squash Vine Borer—1 to 2 qts. per acre. For Squash Vine Borer, apply weekly to flower buds, stems, and vines beginning when moths first appear.

Safflower: Green Peach Aphid—Use 2 quarts per acre. Do not apply after flower heads open.

Spinach (21): Crown Mite, Green Peach Aphid—Use 1/2 quarts per acre. Do not exceed one application.

Strawberries (4): Cyclamen Mite—Use 1 quart per 100 gallons. Apply 800 gallons per acre on West Coast; 400 gallons per acre in other areas. Do not apply at intervals of less than 35 days when fruit is present. Meadow Spittlebug, Strawberry Aphid—Use 2 quarts per acre. Tarnished Plant Bug—Use 1 quart per 100 gallons or 2 quarts per acre. Do not re-apply within 15 days or more than twice within a 35-day period when fruit is present. Garden Symphylan (Northwest Only—aids in reducing damage)—Use 2 quarts per 100 gallons plant dip. Mix thoroughly. Dip entire plant. When emersing bundles of plants, make certain any trapped air is forced out to assure thorough wetting of the entire plant. Drain and allow plants to dry before setting them out in the field. Wear rubber gloves during dipping operation:

Sugar Beets (0): Green Peach Aphid—Use 1 to 2 quarts per acre. Meadow Spittlebug—Use 1 to 2 quarts per acre. Sugarbeet Webworm— Use 3 to 4 pints per acre. Do not feed sugarbeet tops to livestock.

Sugarbeets (Western Use) (0): Green Peach Aphid, Meadow Spittlebug—Use 1 to 2 quarts per acre. Sugarbeet Webworm—Use 1½ to 2 quarts per acre. Do not feed treated tops to livestock.

Sunflower (0): Sunflower Moth---Use 2 quarts per acre. Do not exceed 3 applications. Make first application at onset of bloom and make 2 more applications at 4 to 7 day intervals. Do not feed treated forage to fivestock.

Sweet Potatoes (South-Central States Only): Banded Cucumber Beetle Larvae (aids in the control of)—Use 2 to 4 quarts per acre broadcast or 2/3 to 11/3 quarts 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. Sweet Potato Flea Beetle—Use 1 quart in sufficient water to treat one acre. Apply shortly after transplanting or as soon as flea beetles appear. If necessary, make a second application 7 to 10 days later. Do not feed treated potatoes to livestock.

Tobacco (5): Budworm, Cabbage Looper, Flea Beetle, Green Peach Aphid, Hornworm—Field: Use 1 to 2 quarts per acre. Apply in sufficient water for uniform coverage. Stink Bug—Use 2 to 3 quarts per 100 gallons. Seed Bed: Mix 1 quart per 100 gallons of water and apply 6 gallons spray per 100 square yards. Plant Bed: Green June Bug Larvae—Use ½ quart per 100 gallons of water and drench plant bed with 1 gallon spray per square yard.

When using a knapsack sprayer, apply the recommended amount of this insecticide in 20 to 30 gallons of water per acre using a maximum of 20 pounds per square inch and holding the spray nozzle 12 to 18 inches above the plant. Some phytotoxicity may occur under conditions of high humidity with temperatures above 85° F.

Tomatoes (1): Blister Beetles, Colorado Potato Beetle, Flea Beetles, Green Peach Aphid—Use 1 qt. per acre. Cabbage Looper—Use 1½ qts. per acre. Stink Bugs—Use 1½ to 2 qts. per acre. Tomato Frutworm, Tomato Russet Mite, Yellowstriped Armyworm—Use 2 qts. per acre. Tomato Hornworm—Use 1 to 2 qts. per acre. Whitefly—Use 1 qt. per 100 gals., using 100 to 200 gals per acre. For both field and greenhouse use In greenhouse applications, wear a mask or respirator approved by MSA and OSHA for protection against endosultan.

Tomatoes (Western Use) (1): Blister Beetles, Colorado Potato Beetle, Flea Beetles, Green Peach Aphid, Tomato Hornworm, Webworm (Calif), Whitefly - Use 1 to 2 quarts per acre. Cabbage Looper, Stink Bugs-Use 1 to 10 2 quarts per acre. Tomato Fruitworm, Yellowstriped Armyworm. Tomato Russet Mite- Use 2 quarts per acre. In greenhouse applications, wear a mask or respirator approved by MSA and OSHA for protection against endosultan.



Walnuts: Walnut Aphid—Use 3 to 4 quarts per acre. Do not use after husk split. Do not graze livestock on orchard crops or grasses in treated areas.

### Commercially Grown Ornamentals Ornamental Plants

Leatherteat Fern (Leather Holly Fern): Leatherteal Fern Borers:-Use 1 quart per 100 gallons. Begin treatment when first farval feeding is observed in the mid-vein area at the base of the leaflets. Repeat at intervals of 2 to 3 weeks as necessary to maintain control.

Ornamentals, Greenhouse & Out-of-Doors: Aphids, Cyclamen Mite, Rose Chafer, Whitelly---Use 1 qt per 100 gals. On chrysanthemums, best results will be obtained if applied before plants flower. Do not use on White Birch trees. Do not apply to "Bonnafon Deluxe," "Fred Shoesmith" and "White Knight" chrysanthemums as injury may result. Ingreenhouse applications, wear-a mask or respirator approved by MSA and OSHA for protection against endosultan-

#### **Ornamental Trees and Shrubs**

Dogwood, Lilac: Dogwood Borer, Lilac Borer-Use 1 to 2 quarts per 100 gallons. Apply in early June and repeat in 10 to 14 days. Drench all bark areas down to ground level.

Douglas Fir (Grown for Ornamentals) Pacific Northwest Only: Cooley Spruce Gall Aphid, Douglas Fir Needle Midne—Use 1 quart per 100 gallons or 2 teaspoonfuls per gallon. To control Gall Aphid, apply when white, cottony tufts appear. To control Needle Midge, apply in late April or early May just before buds open.

Shade Trees, Shrubs: Aphids—Use 1 quart per 100 gallons. Do not use on White Birch.

Taxus: Taxus Bud Mite-Use 1 quart per 100 gallons. Make 3 to 5 applications as required beginning in mid-May. A thorough treatment of foliage, twigs and bark is essential. Black Vine Weevil-Use 2 quarts per 100 gallons. Spray thoroughly and drench surface of soil under plants. Apply when weevils first appear; repeat in 14 days.

### 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 buyer at his own risk.

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