

Code 3212

Gallons Net Contents

Thiodan® 3 E.C.

Insecticide

EPA Reg No 279-2924

EPA Est. 279-NJ-1

Active Ingredients:

*Endosulfan (Hexachlorocyclopentadiene-1,2-dithiolane-3,4-diol)
-2,4,3-benzodioxathiepin oxide)
Xylene range aromatic solvent

33.7%

57.7%

Inert Ingredients:

3.6%

100.0%

*Thiodan

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

Thiodan is a registered trademark of Canadian Hoechst Limited.

KEEP OUT OF REACH OF CHILDREN

WARNING

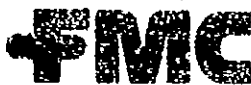
In case of contact, immediately remove contaminated clothing and flush skin or eyes with plenty of water; for eyes, get medical attention.

Antidote

Note to Physicians: Thiodan is a central nervous system stimulant and may cause convulsions. There is no specific antidote. Barbituric acid derivatives may be used in treatment.

For Emergency Assistance Call 716-735-3765

See side panel for additional cautions.



FMC Corporation
Agricultural Chemical Group
2000 Market Street
Philadelphia PA 19103

PRECAUTIONARY STATEMENTS

Hazards to Humans (& Domestic Animals) Warning

Hazardous if swallowed, inhaled, or absorbed through skin. Do not breathe spray mist. Do not get in eyes, on skin, or on clothing. Wash thoroughly with soap and water after handling and before eating or drinking. Wear clean clothing. During commercial exposure in spray-mixing and loading operations, wear clean synthetic rubber gloves and a pesticide respirator jointly approved by the Mining Enforcement and Safety Administration (formerly the U.S. Bureau of Mines) and by the National Institute for Occupational Safety and Health under the provisions of 30 CFR Part II. Do not apply or allow to drift to areas occupied by unprotected humans or beneficial animals.

Environmental Hazards

This product is toxic to fish, birds and other wildlife. Birds feeding in treated areas may be killed. Shrimp and crab may be killed at application rates recommended on this label. Do not apply where there are important resources. Keep out of lakes, streams, ponds, tidal marshes, and estuaries. Do not apply where run-off is likely to occur. Do not apply when weather conditions favor drift from the areas treated. Do not contaminate water by cleaning of equipment or disposal of wastes and containers. Apply only as specified on this label.

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

Physical or Chemical Hazards

Do not store at temperatures below 20° F.
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.

Storage and Disposal

Do not contaminate water, food, or feed by storage or disposal. Open dumping is prohibited. Pesticide spray pressure or residue that cannot be used or chemically processed should be disposed of in a landfill approved for pesticides or buried in a safe place away from water supplies. Triple rinse (or equivalent) and offer for recycling, reconditioning or disposal in approved landfill or bury in a safe place. Drums may be reused and offered for reconditioning. Consult Federal, State or Local authorities for approved alternate procedures.

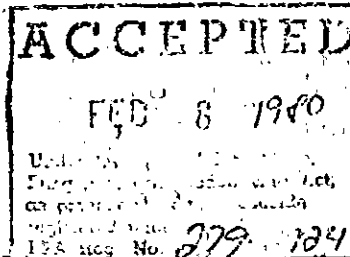
Warning: Workers entering treated areas within 24 hours of application should wear protective clothing.

Do not use in undrained form.

Not for use or storage in or around the home.

Apply the listed amount per acre when insects first appear and repeat as required to maintain effective control. Use sufficient water for thorough coverage, unless otherwise noted for listed crops. Coverage of upper and lower leaf surfaces is essential for good control. 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 and a minimum of 20 gallons of finished spray per acre on deciduous trees and vines. When 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. 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 table.

Atafts, grown for forage (21) Meadow Spillbug — 2.3 oz. per acre. Apply 1 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 ataft is 4 to 6 inches tall. Apply in a minimum of 10 gals. of water per acre by ground or 2 gals. of water per acre by air. Do not apply



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more than once per cutting. Do not graze or cut forage within 21 days of treatment. Seed crop only: Aphids — 1-1/3 pints. Lygus Bugs — 2 to 2-2/3 quarts. Do not feed treated forage to dairy or meat animals. Do not use on forage to be sold commercially or shipped interstate.

Almonds Early infestation of Peach Twig Borer — 2-1/2 to 3-1/3 qts. per acre for control of early season infestation. Apply during popcorn, pink or petal fall. Use in a minimum of 200 gals. of water per acre. 40 gals. per acre concentrate. For areas less than one acre use 1 qt. per 100 gals. of water. Do not exceed one application per season. Treated fruit may be fed to livestock and dairy animals.

Apples [25] Apple Ayrud, Rosy Apple Aphid, Woolly Apple Aphid — 2-3 qt. per 100 gals. or 2-2/3 to 3-1/3 qts. per acre. Apple Rust Mite — 1-1/3 to 2-2/3 qts. per 100 gals. or 4 to 5-1/3 qts. per acre. Do not feed produce from treated apples to livestock. Do not exceed 2 applications during the fruiting period.

Apricots see Peaches

Barley, Oats, Rye, Wheat Army cutworm — 1-1/3 pt. per acre. For aerial application apply in 2 gals. diesel fuel or oil per acre. Cereal Leaf Beetle (Ill. Illinois, Indiana, Michigan, and Ohio only) — Use 2-3 to 1-1/3 pints per acre. Apply when small larvae are readily found in the field. For aerial application use a minimum of 1 to 2 gals. of water per acre. Do not apply after heads begin to form. Do not feed treated forage to livestock.

Beans [3] succulent and dry (except Lima Beans) Black Bean Aphid, Bean Leafhopper, Cucumber Beetles, Green Stink Bug, Mexican Bean Beetle — Use 1-1/3 to 2-2/3 pt. Western Bean Cutworm — Use 1-1/3 qts. Do not exceed 3 applications per season. Do not feed threshings or allow livestock to graze in treated fields.

Blueberries Rubberry Bud Mite — 2 qts. 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.

Bor Elder Bark Elder Bug — 2 qts. per 100 gals. (1-1/3 tablespoons per gal.) Spray foliage and trunks when insects first appear. Repeat as required. In late summer or fall spray tree trunks, outside walls, fences and other places where bugs congregate.

Broccoli [7], Brussels Sprouts [14], Cabbage [7], Cauliflower [14] Cabbage Aphid, Cabbage Looper, Cross-striped Cabbageworm, Diamond-back Moth Larvae, Flea Beetle, Harlequin Bug, Imported Cabbageworm, Stink Bug — 1 to 1-1/3 qts. Armyworms, Cutworms — 1-1/3 qts. per acre.

Brussels Sprouts see Broccoli

Cabbage see Broccoli

Carrots [7] Green Peach Aphid — 1-1/3 to 2-2/3 pts. Do not exceed 2 applications. Do not use for food or feed.

Cauliflower see Broccoli

Celery [7] Green Peach Aphid — 1-1/3 pt. — or — Celery [4] Green Peach Aphid, Cabbage Looper — 2-2/3 pts. Do not exceed 3 applications per season.

Cherry [21] Plum Rust Mite — 1/3 qt. per 100 gals. or 2-2/3 to 3-1/3 qts. per acre. Do not exceed 2 applications after shuck split. Mineola Moth (Michigan only) — 1-1/3 qts. per 100 gals. applied in delayed dormant period.

Cherry, Peach, Plum Nursery Black Dip Peach Tree Borer — Thoroughly mix 2-3 gal. per 40 gals. of water. Immerse the bundles of trees so that the roots and crowns are covered well where the grafting bud scar. Plant immediately or dry before returning to storage. Wear rubber gloves when dipping.

Citrus [21] Cabbage Looper, Diamond-back Moth Larvae, Harlequin Bug, Imported Cabbageworm — 1 qt. per acre. Apply only once per season.

Cucumbers [6], Melons [6], Summer & Winter Squash [6] Aphids, Cucumber Beetles, Striped Flea Beetle, Melonworm, Pickworm, Rindworm (on watermelons), Squash Beetle, Spiny Bug, Squash Vine Borer — 1-1/3 to 2-2/3 pts. For vine borer control apply weekly to flowerbuds, stems and vines beginning when moths first appear. For Cabbage Looper and Diamond-back Moth use 1-1/3 qts.

Dogwood Dogwood Borer, Lilac Lilac Borer — 2-3 to 1-1/3 qts. per 100 gals. Apply in early June and repeat in 10 to 14 days. Branch at bark areas down to the ground level.

Eggplants [1] Colorado Potato Beetle, Flea Beetle, Green Peach Aphid, Whitefly — 1-1/3 pt. per acre.

Felled Logs Bark Beetles (Scolytid species) — 1-1/3 gals. per 100 gals. Bark Beetles (Buprestids, Cerambycids, Curculionids) — 2-2/3 gals. per 100 gals. Apply in late Spring to felled logs. Spray logs thoroughly to the point of spray runoff.

Grapes [7] Grape Leafhopper — 2-3 quart per 100 gallons or 1-1/3 to 2 quarts per acre. Rose Chaler — 2-3 quart per 100 gallons. Do not apply to Concord variety as berries require 14 to 15 days. Ground application preferred.

Kale [21] Cabbage Flea Beetle, Harlequin Bug, Imported Cabbageworm — 1 qt. per acre. Apply only once per season.

Leatherleaf Fern Leatherleaf Fern Borer — 2-3 qt. per 100 gals. Begin treatment when first larval feeding is observed in the mid-vein area at the base of the leaflets. Repeat at intervals of 2 to 3 weeks as necessary.

Lettuce [14] Cabbage Looper, Green Peach Aphid, Diamond-back Moth Larvae, Imported Cabbageworm — 1 to 1-1/3 qts. Do not exceed 3 applications after thinning head lettuce and remove outside leaves at harvest. Do not exceed 2 applications per season on leaf lettuce. Do not feed crop refuse to livestock.

Lilac see Dogwood

Macadamia Nuts [6] Southern Green Stink Bug — 1-1/3 quarts per 100 gallons of water (maximum of 5 gallons per acre). Do not graze livestock in treated groves.

Musard Greens [21] Aphids, Cabbage Looper, Imported Cabbageworm — 1 qt. per acre. Do not exceed 1 application per season.

Nectarines see Peaches

Oats see Barley

Omarcentale (greenhouse, and out-of-doors) Aphids, Cyclamen Mite, Whitefly, Rose Chaler — 2-3 qt. per 100 gals. On chrysanthemums, best results will be obtained if applied before plants flower. Do not apply to "Bonneton Delux", "Fred Shoemith" and "White Knight" chrysanthemums as injury may result. Do not use on birch trees. In greenhouse applications wear approved mask or respirator.

Peaches [30], Apricots [30], Nectarines [30] Aphids (Black Cherry, Black Peach, Green Peach, Rusty Plum), Caterpillar, Flea Beetle, Peach Tree Borer — 2-3 quart per 100 gallons or 2-2/3 to 3-1/3 quarts per acre. Lesser Peach Borer — 1 quart per 100 gallons. Peach Silver Mite — 1-3 quart per 100 gallons or 2-2/3 to 3-1/3 quarts per acre. Do not exceed 2 applications during fruiting period. For Lesser Peach Tree Borer, thorough wetting of trunks and main branches is important.

Peach Nursery Stock Dip see Cherry Nursery Stock Dip

Pears [7] "Conspicuous Stink Bug — Ground treatment, use 2-3 quart per 100 gallons, 200 to 400 gallons spray per acre applied to orchard floor and ground around trees prior to bloom. Do not graze livestock in treated orchards. Feller treatment, use 2-3 quart per 100 gallons or 2-2/3 to 3-1/3 quarts per acre. Stink Bugs must be wet to obtain control. Pear Rust Mite — 2-3 quart per 100 gallons or 2-2/3 to 3-1/3 quarts per acre. Pear Leaf Blotch Mite — 1-1/3 to 2-2/3 quart per 100 gallons applied to a post harvest or dormant treatment. Pear Psyllid — 3-1/3 quarts in sufficient water to treat 1 acre. (Minimum of 10 gallons per acre for aerial application, 40 gallons per acre for semi-concentrate, and 300 gallons per acre for dilute). Apply when adults are first observed or nymphs are small and repeat to maintain control. Make no more than 2 applications during the fruiting period. [21] Make no more than 5 applications during the fruiting period. NOTE: Aerial application does not result in satisfactory control and should only be employed if impossible to apply by ground.

Pear, succulent [21] Pear Aphid, Pear Nectar — 1-1/3 to 2-2/3 pts. per acre. Do not exceed 2 applications during the fruiting period. Use only on pears to be harvested by combine. Do not feed treated vines to livestock or allow to graze in treated fields.

Pecans Black Pecan Aphid — 1 qt. per 100 gals. Do not apply after shuck split. Do not graze livestock in treated groves.

Peppers [4] Green Peach Aphid, Flea Beetle, Hornworms, Pepper Maggot — 1-1/3 to 2-2/3 pts. 1 day if maximum of 1-1/3 pt. per acre is applied.

Pines (Austrian, Jack, Red, Scotch, White) Zimmerman Pine Moth — 1 qt. per 100 gal. Apply in mid-April and again if necessary in late fall. Thoroughly wet bark and main stem, especially where branches join main stem.

Plums [7], Prunes [7] Lesser Peach Tree Borer — 1 qt. per 100 gals. or 2-2/3 to 3-1/3 qts. per acre. Apply spray to thoroughly wet trunks and main branches. Peach Tree Borer — 1 qt. per 100 gals. or 2-2/3 to 3-1/3 qts. per acre. Spray thoroughly to cover all bark areas from ground to scaffold limbs.

Plum Nursery Stock Dip see Cherry Nursery Stock Dip

Potatoes [6] Aphids, Armyworms, Colorado Potato Beetle, Green Stink Bug, Leaf-footed Bug, Potato Flea Beetles, Potato Leafhopper, Potato Tubeworm, Whitefly — 1-1/3 to 2-2/3 pts. per acre. European Corn Borer, Potato Fly, 1-1/3 to 1-1/3 qts. per acre. False Chinch Bug — 1-1/3 qt. per acre. Three-lined Potato Beetle — 1-1/3 pt. per acre.

Prunes see Plums

Pumpkins [6] Aphids, Cucumber Beetles, Squash Vine Borer — 1-1/3 to 2-2/3 pts. per acre. For vine borer control apply weekly to flower buds, stems and vines beginning when moths first appear.

Rye see Barley

Sunflower Green Peach Aphid — 1-1/3 quarts per acre. Do not apply after flower has

Shade Trees (except Birch), Shrubs Aphids — 2/3 qt. per 100 gals.

Shrubs see Shade Trees

Spinach [21] Crown Mite, Green Peach Aphid — 1 qt. Do not exceed one application per season.

Spruce Spruce Gird Aphid (New England area only) — 2/3 qt. per 100 gals. Apply in late April or early May when aphids are present but before galls are formed.

Squash, Summer and Winter see Cucumbers

Strawberries [4] Cyclamen Mite — 2-2/3 qts. per acre in 400 gallons of water. Do not reapply within 35 days when fruit is present. Meadow Spittlebug, Strawberry Aphid, Tarnished Plant Bug — 1-1/3 qts. per acre in 200 gals. of water. Do not reapply within 15 days or more than twice within a 35 day period when fruit is present.

Sugar Beets [30] Green Peach Aphid — 2/3 to 1-1/3 qts. Meadow Spittlebug — 2/3 qt. Sugar Beet Webworm — 1 to 1-1/3 qts. Do not feed treated tops to livestock.

Sunflower [6] Sunflower Moth — 1-1/3 qts. per acre. Do not exceed 3 applications. Make first application at onset of bloom and make two more applications at 4 to 7 day intervals. Do not feed treated forage to livestock.

Sweet Corn, fresh vegetable use only [6] Corn Leaf Aphid — 1-1/3 qts. Corn Earworm — 2 qts. Apply 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 livestock or allow to graze in treated fields.

Sweet Potatoes [6] Sweet Potato Flea Beetle — 2-3 qts. per acre. Begin applications shortly after transplanting or as soon as Flea Beetles appear. Banded Cucumber Beetle Larvae (adds in control of, and for use in South Central States only) — 1-1/3 to 2-2/3 qts. per acre broadcast. Work into the soil to a depth of approximately 3 inches making a single treatment just prior to plant set. Do not feed treated potatoes to livestock.

Texas Taxus Bud Mite — 2/3 qt. per 100 gals. Apply 3 to 5 applications beginning in mid-May. Thorough treatment of foliage, twigs and bark is essential.

Tobacco [6] Flea Beetle, Hornworm, Budworm, Green Peach Aphid, Cabbage Looper — Field: 2-3 to 1-1/3 qts. — Seed Bed: Mix 2-3 qt. per 100 gals. of water and apply 6 gals. spray per 100 sq. yds. Green June Bug Larvae — Use 1/3 qt. per 100 gals. of water and drachm clear bed with 1 gal. spray per sq. yd. Stink Bug — Use field application of 2/3 qt. per 100 gals.

Tomatoes [Field and Greenhouse] [1] Borer Beetle, Colorado Potato Beetle, Flea Beetle, Green Peach Aphid — 2-3 qt. Hornworms — 2-3 to 1-1/3 qts. Tomato Russet Mite, Tomato Fruitworm, Yellow-striped Armyworm — 1-1/3 qts. Stink Bugs — 1 to 1-1/3 qts. Cabbage Looper — 1 qt. Whitefly — 2/3 qt. per 100 gals. in 100 to 200 gals. water.

Watercress [7] Cyclamen Mite — 2-3 to 1-1/3 quarts per acre. Make first application after cutting before new growth starts and repeat 7 to 10 days later.

Wheat see Barley

MEASURING GUIDE

1 qt. = 32 oz.	1 pint = 16 oz.
2 1/2 qt. = 21 oz.	2/3 pint = 10 oz.
1 1/3 qt. = 11 oz.	1/3 pint = 5 oz.

Users should use 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 of handling and/or storage of the material when such use and of 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.

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.

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