

Code 3212

5-Gals. Net



THIODAN[®] 3 E. C.

INSECTICIDE

EPA Reg. No. 279-2924

ACTIVE INGREDIENTS:

*Endosulfan (Hexachlorohexahydromethano-2,4,3-benzodioxathiepin oxide)	33.7%
Xylene base aromatic petroleum solvent	60.5%
INERT INGREDIENTS:	5.8%
	<hr/> 100.0%

*Thiodan U. S. Patent No. 2,799,685
Thiodan 3 E. C. contains 3 pounds Thiodan per gallon.

WARNING

KEEP OUT OF REACH OF CHILDREN.

**For Emergency Assistance Call
716-735-3765**

SEE SIDE PANEL FOR ADDITIONAL CAUTIONS.

Thiodan is a registered trademark of Canadian Hoechst Limited



NIAGARA CHEMICAL DIVISION
FMC CORPORATION
MIDDLEPORT, N. Y. 14105

ANTIDOTE

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

WARNING: Hazardous if swallowed, inhaled, or absorbed through skin! Do not breathe spray mist. Do not get in eyes, on skin or on clothing. In case of contact, immediately remove contaminated clothing and flush skin or eyes with plenty of water; for eyes, get medical attention. Wash thoroughly with soap and water after handling and before eating or smoking; wear clean clothing. During commercial or prolonged exposure in spraying and loading operations, wear clean synthetic rubber gloves and a mask or respirator of a type passed by the U.S. Bureau of Mines for Endosulfan protection. Do not apply or allow to drift to areas occupied by unprotected humans or beneficial animals.

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

DO NOT STORE AT TEMPERATURES BELOW 32° F.

DO NOT USE IN UNDILUTED FORM.

DO NOT USE, POUR, SPILL OR STORE NEAR HEAT OR OPEN FLAME

This product is toxic to fish, birds and other wildlife. Birds feeding on treated areas may be killed. Keep out of lakes, ponds and streams. 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 of equipment or disposal of wastes. Apply this product only as specified on this label.

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

Rinse equipment and containers and DISPOSE OF WASTES by burying at least 18 inches deep in non-crop lands away from water supplies. Do not reuse container; smash or perforate and bury with wastes.

Dealers Should Sell In Original Packages Only.

TERMS OF SALE OR USE: On purchase or use of this product buyer and user agree to the following conditions:

WARRANTY: Niagara warrants that this product, as of the time of sale by Niagara, (1) conforms to the ingredient statement on the label, and (2) is reasonably fit for the purposes set forth in the Directions for Use. EXCEPT AS SO WARRANTED THE PRODUCT IS SOLD AS IS. NIAGARA MAKES NO OTHER WARRANTY EXPRESS OR IMPLIED.

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. Notice of any claim must be reported to Niagara within 10 days of discovery by buyer or user, failing which buyer or user waives any claim for such damage.

EXCUSE FROM NON-CONTROLLABLE CONDITIONS: Because of certain critical conditions created or incurred by buyer or user or over which Niagara has no control, buyer and user, as a condition of purchase or use, assume responsibility for and release Niagara from, liability arising out of the handling or use of the product attributable to such causes. No person is authorized to vary or waive any statement contained herein.

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DIRECTIONS FOR USE

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 in 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. Observe days interval between last application and harvest indicated by number in () following the crop.

ROOT CROPS: Do not plant root crops other than carrots, potatoes, sugar beets and sweet potatoes as follow-up crops. When applying this material by aircraft, mix the recommended amount with sufficient water to provide a minimum of 1 gallon finished spray per acre. 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. used.

ALFALFA, grown for forage (21): Meadow Spittlebug - $\frac{3}{4}$ pt. 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 alfalfa is 4 to 6 inches tall. Apply in at least 10 gals. of water per acre by ground applicator or in at least 2 gals. of water per acre by airplane. Do not apply more than once per cutting. Do not graze or cut forage within 21 days of treatment.

BARLEY, OATS, RYE, WHEAT: Army Cutworm - $1\frac{1}{2}$ pt. per acre. Do not apply after heads begin to form. Do not feed treated forage to dairy animals or animals being finished for slaughter. For airplane application apply in 2 gals. diesel fuel oil per acre.

BEANS (3), succulent and dry (except Lima Beans: Black Bean Aphid, Bean Leaf Skeletonizer, Cucumber Beetles, Green Stink Bug, Mexican Bean Beetle - Use $1\frac{1}{2}$ to $2\frac{3}{4}$ pt. Western Bean Cutworm - Use $1\frac{1}{2}$ qts. Do not exceed 3 applications per season. Do not feed threshings or allow livestock to graze in treated fields.

BLUEBERRIES: Blueberry 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.

BROCCOLI (7), **CABBAGE** (7), **BRUSSELS SPROUTS** (14), **CAULIFLOWER** (14): Cabbage Aphid, Cabbage Looper, Cross-striped Cabbageworm, Diamond-back Moth Larvae, Flea Beetle, Harlequin Bug, Imported Cabbageworm, Stink Bug - 1 to $1\frac{1}{2}$ qts. Armyworms, Cutworms - $1\frac{1}{2}$ qts. per acre.

CARROTS (7): Green Peach Aphid - $1\frac{1}{2}$ to $2\frac{3}{4}$ pts. Do not exceed 2 applications. Do not use tops for food or feed.

CELERY (7): Green Peach Aphid - $1\frac{1}{2}$ pt. - or - **CELERY** (4): Green Peach Aphid, Cabbage Looper - $1\frac{1}{2}$ to $2\frac{3}{4}$ pts. Do not exceed 3 applications.

COLLARDS (21): Cabbage Looper, Diamond-back Moth Larvae, Harlequin Bug, Imported Cabbageworm - 1 qt. per acre. Do not exceed 1 application.

CUCUMBERS (0), **MELONS** (0), **SUMMER AND WINTER SQUASH** (0): Aphids, Cucumber Beetles, Striped Flea Beetle, Melonworm, Pickleworm, Rindworm (on watermelons), Squash Beetle, Squash Bug, Squash Vine Borer - $1\frac{1}{2}$ to $2\frac{3}{4}$ pts. For vine borer control, apply weekly to flowerbuds, stems and vines beginning when moths first appear. For Cabbage Looper and Omnivorous Leaf Roller on Melons use $1\frac{1}{2}$ qts.

EGGPLANTS (1): Colorado Potato Beetle, Flea Beetle, Green Peach Aphid, Whitefly - $1\frac{1}{2}$ pt.

KALE (21): Cabbage Flea Beetle, Harlequin Bug, Imported Cabbageworm - 1 qt. per acre. Do not exceed 1 application.

LETTUCE (14): Cabbage Looper, Green Peach Aphid, Diamond-back Moth Larvae, Imported Cabbageworm - 1 to $1\frac{1}{2}$ 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.

MUSTARD GREENS (21): Aphids, Cabbage Looper, Imported Cabbageworm - 1 qt. per acre. Do not exceed 1 application.

PEAS, succulent (0): Pea Aphid, Pea Weevil - $1\frac{1}{2}$ to $2\frac{3}{4}$ pts. 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 to graze in treated fields.

PEPPERS (4)*: Green Peach Aphid, Flea Beetles, Hornworms, Pepper Maggot - $1\frac{1}{2}$ to $2\frac{3}{4}$ pts. * 1 day if maximum of $1\frac{1}{2}$ pt per acre is applied.

POTATOES (0): Aphids, Armyworms, Colorado Potato Beetle, Green Stink Bug, Leaf-footed Bug, Potato Flea Beetles, Potato Leafhopper, Potato Tuberworm, Whitefly - $1\frac{1}{2}$ to $2\frac{3}{4}$ pts. per acre. European Corn Borer, Potato Psyllid - 1 to $1\frac{1}{2}$ qts. per acre. False Chinch Bug - $1\frac{1}{2}$ qts. per acre. Three-lined Potato Beetle - $1\frac{1}{2}$ pt. per acre.

PUMPKINS (0): Aphids, Cucumber Beetles, Squash Vine Borer - $1\frac{1}{2}$ to $2\frac{3}{4}$ pts. per acre. For vine borer control, apply weekly to flower buds, stems and vines beginning when moths first appear.

SPINACH (21): Crown Mite, Green Peach Aphid - 1 qt. Do not exceed one application.

STRAWBERRIES (4): Cyclamen Mite - $2\frac{3}{4}$ 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 - $1\frac{1}{2}$ 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 - $\frac{3}{4}$ to $1\frac{1}{2}$ qts. Meadow Spittlebug - $\frac{3}{4}$ qt. Sugar Beet Webworm - 1 to $1\frac{1}{2}$ qts. Do not feed treated tops to livestock.

SWEET CORN, fresh vegetable use only (0): Corn Leaf Aphid - $1\frac{1}{2}$ 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 (0): Sweet Potato Flea Beetle - $\frac{3}{4}$ qts. per acre. Begin applications shortly after transplanting or as soon as flea beetles appear. Banded Cucumber Beetle Larvae (aids in control of, and for use in South Central States only) - $1\frac{1}{2}$ to $2\frac{3}{4}$ 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.

TOBACCO (5): Flea Beetle, Hornworm, Budworm, Green Peach Aphid, Cabbage Looper - **FIELD:** $\frac{3}{4}$ to $1\frac{1}{2}$ qts. - **SEED BED:** Mix $\frac{3}{4}$ qt. per 100 gals. of water and apply 6 gals. spray per 100 sq. yds. Green June Bug Larvae - Use $\frac{1}{2}$ qt. per 100 gals. of water and drench plant bed with 1 gal. spray per sq. yd. Stink Bug - Use field application of $\frac{3}{4}$ qt. per 100 gals.

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TOMATOES (Field and Greenhouse) (1): Blister Beetle, Colorado Potato Beetle, Flea Beetle, Green Peach Aphid — $\frac{2}{3}$ qt. Hornworms — $\frac{2}{3}$ to $1\frac{1}{2}$ qts. Tomato Russet Mite, Tomato Fruitworm, Yellow-striped Armyworm — $1\frac{1}{2}$ qts. Stink Bugs — 1 to $1\frac{1}{2}$ qts. Cabbage Looper — 1 qt. Whitefly — $\frac{2}{3}$ qt. per 100 gals. in 100 to 200 gals. water.

ORNAMENTALS (greenhouse and out of doors): Aphids, Cyclamen Mite, whitefly, Rose Chafer — $\frac{2}{3}$ qt. per 100 gals. On chrysanthemums, best results will be obtained if applied before plants flower. Do not apply to "Bonafon Deluxe", "Fred Shoemsmith", and "White Knight" chrysanthemums as injury may result. Do not use on birch trees. In greenhouse applications wear approved mask or respirator.

SHADE TREES (except Birch), **SHRUBS**: Aphids — $\frac{2}{3}$ qt. per 100 gals.

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

SPRUCE: Spruce Gall Aphid (New England area only) — $\frac{2}{3}$ qt. per 100 gals. Apply in late April or early May when aphids are present but before galls are formed.

BOX ELDER: Box Elder Bug — 2 qts. per 100 gals. ($1\frac{1}{2}$ table-spoonfuls 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.

DOGWOOD: Dogwood Borer; **LILAC**: Lilac Borer — $\frac{2}{3}$ to $1\frac{1}{2}$ qts. per 100 gals. Apply in early June and repeat in 10 to 14 days. Drench all bark areas down to the ground level.

TAXUS: Taxus Bud Mite — $\frac{2}{3}$ qt. per 100 gals. Apply 3 to 5 applications beginning in mid-May. Thorough treatment of foliage, twigs and bark is essential.

SUNFLOWER (0): Sunflower Moth — $1\frac{1}{2}$ 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.

APPLES (30): Apple Aphid, Rosy Apple Aphid — $\frac{2}{3}$ qt. per 100 gals. or $2\frac{2}{3}$ to $3\frac{1}{2}$ qts. per acre. Apple Rust Mite — $\frac{1}{2}$ to $\frac{2}{3}$ qts. per 100 gals. or 4 to $5\frac{1}{2}$ qts. per acre. Do not feed pomace from treated apples to livestock. Do not exceed 2 applications during the fruiting period.

PEACHES (30), **APRICOTS** (30), **NECTARINES** (30): Black Cherry Aphid, Black Peach Aphid, Cat-facing Insects, Green Peach Aphid, Peach Twig Borer, Rusty Plum Aphid — $\frac{2}{3}$ qt. per 100 gals. or $2\frac{2}{3}$ to $3\frac{1}{2}$ qts. per acre. Lesser Peach Tree Borer — 1 qt. per 100 gals. Peach Silver Mite — $\frac{1}{4}$ qt. per 100 gals. or $2\frac{2}{3}$ to $3\frac{1}{2}$ qts. per acre. Do not exceed 2 applications during fruiting period. For Lesser Peach Tree Borer, thorough wetting of trunks and main branches is important.

PLUMS (7), **PRUNES** (7): Lesser Peach Tree Borer — 1 qt. per 100 gals. or $2\frac{2}{3}$ to $3\frac{1}{2}$ qts. per acre. Apply spray to thoroughly wet trunks and main branches. Peach Tree Borer — 1 qt. per 100 gals. or $2\frac{2}{3}$ to $3\frac{1}{2}$ qts. per acre. Spray thoroughly to cover all bark areas from ground to scaffold limbs.

CHERRY (21): Plum Rust (plum nursery) Mite — $\frac{2}{3}$ qt. per 100 gals. or $2\frac{2}{3}$ to $3\frac{1}{2}$ qts. per acre. Do not exceed 2 applications after shuck split. Mineola Moth (Michigan only) — $1\frac{1}{2}$ qts. per 100 gals. applied in delayed dormant period.

ACCEPTED
MAY 01 1973
UNDER THE FEDERAL INSECTICIDE
FUNGICIDE AND RODENTICIDE ACT
FOR ECONOMIC POISON REGISTERED
UNDER NO. 249-222 SUBJECT
TO ATTACHED COMMENTS.

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