

CODE
190

279-1380

12-7-1972

1/4

THIODAN® 50 WETTABLE

INSTRUCTIONS

INSECTICIDE

The enclosed bags containing 1 lb. of Thiodan 50 WP are water soluble. Do not open bags, but add directly to the spray tank during the filling operation. **AVOID HANDLING BAGS WITH WET HANDS.** Do not expose the unused bags to moisture or rain. Reseal the outer polyethylene bag and close carton. Store in a dry place.

(LIFT)

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 day's interval between last application and harvest indicated by number in () following the crop.

APPLES (30): Apple Rust Mite, Woolly Apple Aphid—Use 1 lb. per 100 gals.; 8 lbs. per acre. Do not exceed 2 applications during the fruiting period. Apple Aphid, Rosy Apple Aphid—Use 1 lb. per 100 gals.; 4 to 5 lbs. per acre. No limitations on number of applications. Do not feed pomace from treated apples to livestock.

APPLES (21): Apple Aphid, Rosy Apple Aphid—Use 1 lb. per 100 gals.; 4 to 5 lbs. per acre. If necessary, may use 1½ lbs. per 100 gals. rate prior to petal fall. Do not exceed 3 applications during the fruiting period. Do not feed pomace from treated apples to livestock.

APRICOTS (30), NECTARINES (30), PEACHES (30): Calfacing Insects (Stink Bug Type), Green Peach Aphid, Black Cherry Aphid, Black Peach Aphid, Rusty Plum Aphid, Peach Twig Borer—Use 1 lb. per 100 gals.; 4 to 5 lbs. per acre. Peach Silver Mite—Use ½ lb. per 100 gals. Lesser Peach Tree Borer—Use 1½ lbs. per 100 gals. Do not exceed 2 applications during the fruiting period. For Lesser Peach Tree Borer control thorough wetting of trunks and main branches is important.

APRICOTS (21), NECTARINES (21), PEACHES (21): Peach Tree Borer—Use 1½ lbs. per 100 gals. Spray all bark areas from ground level to scaffold limbs as required to maintain effective control.

CHERRIES (21): Black Cherry Aphid, Plum Rust (Nursery Mite)—Use 1 lb. per 100 gals.; 4 to 5 lbs. per acre. Peach Tree Borer—Use 1½ lbs. per 100 gals. Spray all bark areas from ground level to scaffold limbs. Time applications with moth flight. Lesser Peach Tree Borer—Use 1½ lbs. per 100 gals.; 4 to 5 lbs. per acre. Thorough wetting of trunks and main branches is important.

Do not exceed 2 applications after shuck split.

CHERRIES (Michigan only): Mineola Moth—Use 2 lbs. per 100 gals. Apply in delayed dormant period.

CHERRY, PEACH, PLUM NURSERY STOCK: Peach Tree Borer—Use 4 lbs. per 40 gals. water. Mix thoroughly. Wear rubber gloves during dipping operation. Immerse trees so that roots and crowns are covered well above grafting bud scar. Plant immediately or dry before returning stock to storage.

CITRUS, NURSERY AND NON-BEARING STOCK: Citrus Aphid—Use ½ lb. per 100 gals.; 5 lbs. per acre. Do not apply to bearing trees or to trees that will bear fruit within twelve months.

PLUMS (7), PRUNES (7): Peach Tree Borer, Lesser Peach Tree Borer—Use 1½ lbs. per 100 gals.; 4 to 5 lbs. per acre. Spray all bark areas from ground level to scaffold limbs as required to maintain control. For control of Lesser Peach Tree Borer apply thoroughly to trunk and main branches. Hop Aphid, Leaf Curl Plum Aphid, Thistle Aphid—Use 1 lb. per 100 gals.; 4 to 5 lbs. per acre. Apply when eggs hatch during pre-bloom or petal fall. Summer applications should be made before leaves curl.

GRAPES (7): Grape Leafhopper, Rose Chafer—Use 1 lb. per 100 gals.; 2 to 3 lbs. per acre. Do not use on Concord variety of grapes as severe injury is likely to occur.

PEARS (7): Conspire Stink Bug, Pear Rust Mite—Use 1 lb. per 100 gals.; 4 to 5 lbs. per acre. Do not exceed 2 applications during the fruiting period. Stink Bugs must be wet by spray to obtain control. Pear Psylla—Use 1½ lbs. per 100 gals.; 5 lbs. per acre. To control second generation apply when nymphs are small and repeat in 7 to 10 days, if necessary. Do not exceed 2 applications during the fruiting period. Pear Leaf Blister Mite—Use ½ to 1 lb. per 100 gals. of water. Apply as a post harvest or dormant treatment.

STRAWBERRIES (4): Tarnished Plant Bug, Meadow Spittlebug, Strawberry Aphid—Use 2 lbs. per acre. Do not re-apply within 15 days or more than twice during any 35 day period when fruit is present. Cyclamen Mite—Use 1 lb. per 100 gals.; 4 lbs. per acre. Apply 400 gals. of spray per acre to thoroughly wet the foliage, stem and crowns of the plant. For multiple applications, do not apply at intervals less than 35 days during the fruiting period.

BEANS (3), (Succulent and Dry, Southern Field Peas): Black Bean Aphid, Bean Leaf Skeletonizer, Cucumber Beetle, Green Stink Bug, Mexican Bean Beetle, Cowpea Curculio—Use 1 to 2 lbs. per acre. Do not exceed 3 applications per season. Do not feed treated threshings to livestock or allow to graze in treated fields. Do not use on Lima Beans that are to be removed from the field for processing. For control of cowpea curculio make 3 applications at 5 day intervals, starting when the pods are ½ inch long.

BROCCOLI (7), CABBAGE (7), BRUSSELS SPROUTS (14), CAULIFLOWER (14): Cabbage Aphid, Cabbage Looper, Imported Cabbage Worm, Diamondback Moth Larvae, Cross-striped Cabbage Worm, Flea Beetles, Harlequin Bugs, Stink Bugs—Use 1½ to 2 lbs. per acre. Armyworm, Cutworm—Use 2 lbs. per acre.

EPA REG. NO. 279-1380

ACTIVE INGREDIENT:	*Endosulfan (Hexachlorohexahydromethano-2, 4, 3-benzodioxathiepin oxide)	50.0%
INERT INGREDIENTS:		50.0%
		100.0%

*Thiodan, U. S. Pat. No. 2,799,685

WARNING

KEEP OUT OF REACH OF CHILDREN

For Emergency Assistance Call
716-735-3765

Hazardous If Swallowed, Inhaled, or Absorbed Through Skin! Do not breathe dust or 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 spray-mixing 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.

Workers entering treated fields within 24 hours after application should wear protective clothing.

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.

This product is toxic to fish and wildlife. Keep out of any body of water. Birds feeding on treated areas may be killed. Do not apply when weather conditions favor drift from areas treated. Do not apply where runoff is likely to occur. Do not contaminate water by cleaning of equipment, or disposal of wastes.

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

DISPOSE OF WASTES by burying in non-crop lands away from water supplies. Container should be disposed of by burying with wastes or by burning. Keep out of smoke.

CARROTS (7): Green Peach Aphid—Use 1 to 2 lbs. per acre. Do not use tops for food or feed. Do not exceed 2 applications per season. Do not plant root crops other than carrots, potatoes, sugar beets, and sweet potatoes as follow-up crops.

CELERY (4): Green Peach Aphid, Cabbage Looper—Use 1 to 2 lbs. per acre. Do not exceed 3 applications. — OR — (7): Green Peach Aphid—Use 1 lb. per acre. Unlimited number of applications.

COLLARDS (21): Cabbage Looper, Diamondback Moth Larvae, Harlequin Bug, Imported Cabbage Worm—Use 1½ lbs. per acre. Do not exceed one application.

COTTON: Cotton Leaf Perforator—Use 2 lbs. per acre. Do not apply after bolls open. Do not graze meat or dairy animals in treated fields.

CUCUMBERS (6), MELONS (6), SUMMER AND WINTER SQUASH (6): Aphids, Cucumber Beetles, Striped Flea Beetle, Melonworm, Pickleworm, Rindworm (on watermelons), Squash Beetle, Squash Bug, Squash Vine Borer—Use 1 to 2 lbs. per acre. For Vine Borer control, apply weekly to flower buds, stems, and vines beginning when moths first appear. For Cabbage Looper and Omnivorous Leaf Roller on Melons use 2 lbs. per acre.

EGGPLANTS (1): Blister Beetle, Colorado Potato Beetle, Flea Beetle, Green Peach Aphid, Green Stink Bug, Whitefly—Use 1 lb. per acre.

KALE (21): Cabbage Flea Beetle, Imported Cabbage Worm, Harlequin Bug—Use 1½ lbs. per acre. Do not exceed one application per season.

LETTUCE (14): Cabbage Looper, Diamondback Moth Larvae, Green Peach Aphid, Imported Cabbageworm—Use 1½ to 2 lbs. per acre. On Head Lettuce, do not exceed 3 applications after thinning. Remove wrapper leaves at harvest. Do not feed crop refuse to livestock. On Leaf Lettuce, do not exceed 2 applications per season.

POWDER

NET WEIGHT

1 LB.

2/4

MUSTARD GREENS (21): Aphids, Cabbage Looper, Imported Cabbage Worm—Use 1½ lbs. per acre. Do not exceed one application per season.

PEAS, succulent (0): Pea Aphid, Pea Weevil—Use 1 to 2 lbs. 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—Use 1 to 2 lbs. per acre. *1 day if no more than 1 lb. per acre is used.

POTATOES (0): Aphids, Colorado Potato Beetle, Green Stink Bug, Leaf-footed Bug, Potato Flea Beetle, Potato Leafhopper, Potato Tuberworm, Southern Armyworm, Whitefly—Use 1 to 2 lbs. per acre. European Corn Borer, Potato Psyllid—Use 1½ to 2 lbs. per acre. False Chinch Bug—Use 2 lbs. per acre. Threelined Potato Beetle—Use 1 lb. per acre. Do not plant root crops other than carrots, potatoes, sugar beets, and sweet potatoes as follow-up crops.

PUMPKINS (0): Aphids, Cucumber Beetle, Squash Vine Borer—Use 1 to 2 lbs. per acre. For vine borer, apply weekly to flower buds, stems and vines, beginning when moths first appear.

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

SPINACH (21): Green Peach Aphid, Crown Mite—Use 1½ lbs. per acre. Do not exceed one application per season.

SUGAR BEETS (30): Green Peach Aphid, Meadow Spittlebug—1 to 2 lbs. per acre; Sugar Beet Webworm—1½ to 2 lbs. per acre. Make 1 or 2 applications as needed for control. Do not feed treated tops to livestock. Do not plant root crops other than carrots, potatoes, sugar beets and sweet potatoes as follow-up crops.

SUNFLOWER (0): Sunflower Moth—Use 2 lbs. per acre. Do not exceed 3 applications. Make the first application at the onset of bloom and make two more applications at 4 to 7 day intervals. Do not feed treated forage to livestock.

SWEET POTATOES (South Central States Only): Banded Cucumber Beetle larvae (aids in control of)—Apply 2 to 4 lbs. per acre broadcast, or 2 3 to 1-1/3 lbs. per acre in a 16 inch band over the row (48 inch spacing). Work into the soil to a depth of approximately 3 inches. A single treatment should be made just prior to plant set. Do not feed treated potatoes to livestock. Do not plant root crops other than carrots, potatoes, sugar beets, and sweet potatoes as follow-up crops.

TOBACCO (5): Bud-worm, Cabbage Looper, Flea Beetle, Green Peach Aphid, Hornworm—SEED BED: Use 1 lb. per 100 gals. Apply about 6 gallons of finished spray per 100 square yards. FIELD: Use 1 to 2 lbs. per acre to control above insects. For Stink Bugs—Use 2 to 3 lbs. per 100 gals. PLANT BED: Green June Bug Larvae—Use ½ lb. per 100 gals. drenching at rate of 1 gal. per sq. yd.

TOMATOES (FIELD AND GREENHOUSE) (1): Blister Beetle, Colorado Potato Beetle, Flea Beetle, Green Peach Aphid—Use 1 lb. per acre. Hornworm—Use 1 to 2 lbs. per acre. Tomato Fruitworm, Yellow-striped Armyworm—Use 2 lbs. per acre. Cabbage Looper, Stink Bugs—Use 1½ to 2 lbs. per acre. Whitefly—Use 1 lb. per 100 gals.; 100 to 200 gals. per acre.

FILBERTS (0): Filbert Aphid—Use 1 lb. per 100 gals. or 3 to 4 lbs. per acre. Filbert Leafroller—Use 3 to 4 lbs. per acre. Do not graze livestock in treated groves.

MACADAMIA NUT (0): Southern Green Stink Bug—Use 2 lbs. per 100 gals. Do not graze livestock in treated groves.

PECANS: Black Pecan Aphid, Pecan Nut Casebearer, Spittlebug—Use 1½ lbs. per 100 gals. Do not apply after shuck split. Do not graze livestock in treated groves.

WALNUT: Walnut Aphid—Use 3 to 4 lbs. per acre. Do not apply after husk split. Do not graze livestock in treated groves.

DOGWOOD, LILACS: Dogwood Borer, Lilac Borer—Use 1 to 2 lbs. per 100 gals. Apply in early June and repeat in 10 to 14 days. Drench all bark areas down to the ground level.

LEATHERLEAF FERN: Leatherleaf Fern Borer—Use 1 lb. 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.

ORNAMENTALS (greenhouse & out of doors): Aphid, Cyclamen Mite, Rose Chater, Whitefly—Use 1 lb. per 100 gals. On Chrysanthemums, best results will be obtained if applied before plants flower. Do not use on Birch Trees. In greenhouse wear mask or respirator approved for Endosulfan protection.

TAXUS: Taxus Bud Mite—Use 1 lb. per 100 gals. Apply 3 to 5 applications beginning in mid-May. Spray foliage, twigs and bark. Black Vine Weevil—Use 2 lbs. per 100 gals. Spray thoroughly and drench soil under plants. Apply when weevils first appear. Repeat in 14 days.

ADDITIONAL INFORMATION APPEARING ON BAGS TO WHICH THIS LABEL WILL BE ATTACHED.



Dealers Should Sell in Original Packages Only.

DO NOT ALLOW THIS MATERIAL TO DRIFT ONTO NEIGHBORING CROPS OR NON-CROP AREAS OR USE IN A MANNER OR AT A TIME OTHER THAN IN ACCORDANCE WITH LABEL DIRECTIONS BECAUSE ANIMAL, PLANT OR CROP INJURY, ILLEGAL RESIDUES OR OTHER UNDESIRABLE RESULTS MAY OCCUR.

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

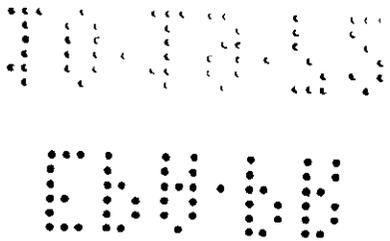
WARRANTY. Niagara warrants that this product, as of the time of sale by Niagara, (1) conforms to the ingredient statement on the label, and (2) is reasonably fit for the purposes set forth in the Directions for Use. EXCEPT AS SO WARRANTED THE PRODUCT IS SOLD AS IS. NIAGARA MAKES NO OTHER WARRANTY EXPRESS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

MANUFACTURED IN U. S. A. BY

**NIAGARA CHEMICAL DIVISION
FMC CORPORATION
MIDDLEPORT, NEW YORK**



4/4

4"

THIODAN 50 WETTABLE POWDER
INSECTICIDE

EPA REG. NO. 279-1380

ENDOSULFAN 50% INERTS 50%

CAUTION

KEEP OUT OF REACH
OF CHILDREN

REFER TO OUTER LABEL FOR USES
AND PRECAUTIONS

NIAGARA CHEMICAL DIVISION
MIDDLEPORT, NEW YORK 14105

WATER SOLUBLE PACKAGE
NET WT. (1) ONE POUND

5"

ACCEPTED

DEC 7 1972

UNDER THE FEDERAL INSECTICIDE
FUNGICIDE AND RODENTICIDE ACT
FOR ECONOMIC POISON REGISTERED
UNDER NO. 279-1380 SUBJECT
TO ATTACHED COMMENTS.

THIODAN