

IMIDAN® 50-WP

AGRICULTURAL INSECTICIDE -- WETTABLE POWDER
FOR AGRICULTURAL USE ONLY

ACTIVE INGREDIENT:

N-(Mercaptomethyl)phthalimide, S-(0,0-dimethyl
phosphorodithioate).

INERT INGREDIENTS:

ACCEPTED
 MAY 18 1983
 EPA Reg. No. 476-1917

50%
50%
100%

KEEP OUT OF REACH OF CHILDREN

WARNING

STATEMENT OF PRACTICAL TREATMENT

Call a Physician Immediately! If a known exposure occurs or if poisoning is suspected, do not wait for symptoms to develop. Immediately initiate the recommended procedures described below and simultaneously contact a physician, the nearest hospital or a Poison Control Center, or call collect, day or night:

(203) 226-6602
STAUFFER CHEMICAL COMPANY

OR

(800) 424-9300
PESTICIDE TEAM SAFETY NETWORK

Inform the person contacted of the type and extent of exposure, describe the victim's symptoms and follow the advice given.

NOTE: Be sure to advise the physician that the compound is a cholinesterase inhibitor and follow the physician's advice.

NOTE TO PHYSICIAN: Exposure may cause cholinesterase inhibition. Atropine by injection is antidotal. 2-PAM is also antidotal when administered early and in conjunction with atropine.

IF SWALLOWED: Call a physician or Poison Control Center immediately. Immediately give large amounts of water and induce vomiting by gagging the victim with a finger placed on the back of the victim's tongue. Give fluids until vomitus is clear. Do not induce vomiting or give anything by mouth to an unconscious person.

IF INHALED: Remove victim to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. If breathing is difficult, give oxygen, preferably with a physician's advice.

IF ON SKIN: Flush with plenty of water for at least 15 minutes. Remove contaminated clothing and shoes. Get medical attention if irritation occurs. Wash clothing before re-use.

IF IN EYES: Hold eyelids apart and flush eyes with large amounts of running water for at least 15 minutes. Call a physician immediately.

SEE LEFT PANEL FOR ADDITIONAL PRECAUTIONARY STATEMENTS

This product is sold only for uses stated on its label. No express or implied license is granted to use or sell this product under any patent in any country except as specified:

Country: United States of America

EPA Reg. No. 476-1917-AA
EPA Est. 477-TX-1

_____ Lbs. Net Wt. _____ kg
RS-830421

Made In U.S.A. By
STAUFFER CHEMICAL COMPANY
WESTPORT, CT. 06881

(LEFT PANEL)

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

WARNING:

- MAY BE HARMFUL OR FATAL IF SWALLOWED, INHALED OR ABSORBED THROUGH THE SKIN.
- Do not get in eyes or on skin, or on clothing.
- Do not breathe spray mist.
- In case of skin contact, immediately wash with soap and hot water.
- Wash hands thoroughly after handling and before eating or smoking.
- Wash all contaminated clothing with soap and hot water before re-use.

ENVIRONMENTAL HAZARDS

- This product is toxic to fish, birds, and other wildlife. Birds and other wildlife feeding on treated areas may be killed.
- Keep out of lakes, streams, and ponds. Do not contaminate water by cleaning of equipment or disposal of wastes.
- Do not apply when weather conditions favor drift from treated areas.
- Apply this product only as specified on this label.
- This pesticide is highly toxic to bees exposed to direct treatment or to residues remaining on the treated area. Do not apply when bees are actively visiting the crop, cover crop, or weeds blooming in the treatment area. Applications should be timed to provide the maximum possible interval between treatment and the next period of bee activity.

STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage and disposal.

STORAGE:

Store in a cool dry place.

PESTICIDE DISPOSAL:

Pesticide, spray mixture, or rinsate that cannot be used according to label instructions must be disposed of according to federal, state, or local procedures under the Resource Conservation and Recovery Act.

CONTAINER DISPOSAL:

Dispose of bags according to approved federal, state, or local procedures under the Resource Conservation and Recovery Act.

NOTICE - READ CAREFULLY

CONDITIONS OF SALE: Stauffer (and seller) offer(s) this product for sale subject to, and buyer and all users are deemed to have accepted, the following conditions of sale and warranty which may only be varied by written agreement of a duly authorized representative of Stauffer.

WARRANTY LIMITATION: Stauffer warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes referred to in the directions for use on the label subject to the inherent risks referred to below. Stauffer makes no other express warranties: THERE IS NO IMPLIED WARRANTY OF MERCHANTABILITY and there are no warranties which extend beyond the description on the label hereof.

INHERENT RISKS: The directions for use of this product are believed to be reliable and should be followed carefully. However, it is impossible to eliminate all risks associated with use. Buyer assumes all risks associated with use or application of this product contrary to label instructions or resulting from extraordinary weather conditions.

LIMITATION OF LIABILITY: In no case shall Stauffer be liable for special, indirect or consequential damages resulting from the use or handling of this product and no claim of any kind shall be greater in amount than the purchase price of the product in respect of which such damages are claimed.

USE PRECAUTIONS

- Read all precautions and directions before using. Apply this product only as specified on this label.
- IMIDAN 50-WP is compatible with most commonly used insecticides and fungicides, but is incompatible with alkaline materials such as spray lime, lime sulfur, and bordeaux mixtures. These materials will reduce the insecticidal activity of IMIDAN 50-WP.
- Insecticidal activity may also be reduced when the water in the spray solution has a pH of 7 or higher. The pH of the spray solution may be corrected by the addition of a suitable buffering or acidifying agent for optimum insecticidal activity.

DIRECTIONS FOR USE

It is a violation of federal law to use this product in a manner inconsistent with its labeling.

Four recommended amount of this material on surface of water in nearly filled spray tank. Add balance of water to fill tank. Keep agitator running during filling and spraying operations. Do not allow mixture to stand. Do not use on gear-type spray equipment.

Applications can be made by aircraft or ground power equipment including concentrate and semiconcentrate equipment. The recommended dosages, except as specified for alfalfa, corn, cotton, peas, and pine seedlings are calculated for high volume conventional hydraulic sprayers. When concentrate and semiconcentrate sprays are used, apply the recommended rate of IMIDAN 50-WP per acre in proportionately lower volumes of water according to equipment manufacturer's directions and state spray schedules. Do not exceed the maximum rate of IMIDAN 50-WP per acre or the time limitations specified for the individual crops. In California, use a minimum of 4 pounds IMIDAN 50-WP per acre on mature Pome and Stone Fruit Trees (3-1/2 pounds on cherries).

RECOMMENDATIONS:

FRUIT AND NUT CROPS

NOTE: Directions for applications to dormant fruit and nut crops are located at the end of this section.

ALMONDS: For control of Peach Twig Borer, apply 1 pound IMIDAN 50-WP per 100 gallons of water (up to a maximum of 6 pounds IMIDAN 50-WP per acre). Apply as a full cover spray when infestation starts. Limit use on bearing almonds to one foliar application per season. Do not apply within 30 days of harvest.

APPLES: For control of Apple Maggot, Codling Moth, Elm Spanworm, Fruit Tree Leafroller, Green Apple Aphid, Green Fruitworm, Gypsy Moth, Obliquebanded Leafroller, Orange Tortrix*, Plum Curculio, Red Banded Leafroller, Rosy Apple Aphid and Tarnished Plant Bug, apply 1 to 1-1/2 pounds per 100 gallons water (or a maximum of 8 pounds per acre per application) as a full cover spray. For heavy insect infestations use the higher dosage rate. Repeat as necessary in accordance with insect infestations and local or state spray programs. Usually suppresses European Red and Two Spotted Mites when used in a seasonal program. Do not apply within 7 days of harvest. Recommended for control of Elm Spanworm, Green Fruitworm, Gypsy Moth, Fruit Tree Leafroller, and Obliquebanded Leafroller in the Northeast only.

*California Only. Consult your local County Agent or Extension Service Representative regarding proper timing of application.

APRICOTS: For control of Apple Maggot, Oriental Fruit Moth, Peach Twig Borer, Plum Curculio, Red Banded Leafroller, apply 1 to 1-1/2 pounds per 100 gallons water (or maximum of 6 pounds per acre per application) as a full cover spray. For heavy insect infestations use the higher dosage rate. Repeat as necessary in accordance with insect infestations and local or state spray programs. Usually suppresses European Red and Two Spotted Mites when used in a seasonal program. Do not apply within 14 days of harvest.

BLUEBERRIES (Northeastern U. S. only): For control of Blueberry Maggot, Cranberry Fruitworm, and Plum Curculio, apply 2 pounds IMIDAN 50-WP in 150 to 200 gallons of water per acre as a foliar spray. A second application may be made when indicated by insect infestations and local or state spray programs. May be applied up to 3 days of harvest.

CHERRIES, SOUR (TART): For control of Cherry Fruit Fly, Fruit Tree Leafroller, Peach Twig Borer, Plum Curculio, apply 1 pound per 100 gallons water (or maximum of 3-1/2 pounds per acre per application) as a full cover spray. Repeat as necessary in accordance with insect infestations and local or state spray programs. Usually suppresses European Red and Two Spotted Mites when used in a seasonal program. Do not apply within 7 days of harvest. Recommended for Cherry Fruit Fly, Fruit Tree Leafroller and Plum Curculio in the Northeast only.

CITRUS (Lemons, Oranges-California, Arizona, and Texas only): For control of California Red Scale and Brown Soft Scale, apply 1 pound IMIDAN 50-WP per 100 gallons of water plus a minimum of one quart (per 100 gallons) of a suitable spray oil according to oil manufacturer's specifications. Apply as a full cover spray using ground application equipment (up to a maximum of 30 pounds IMIDAN 50-WP per acre). Repeat as necessary in accordance with scale infestations and local or state spray programs, up to three applications per season. Do not re-apply within 30-days of the previous application. Do not apply within 7 days of harvest.

GRAPES (West): For control of Grape Leafroller and Omnivorous Leafroller, apply 2 pounds IMIDAN 50-WP in 200 gallons of water per acre. Spray both sides of each row, also tops of vines to assure adequate coverage of fruit and foliage. Applications may be made at any time between egg hatch and pupation for Leafroller and Leafroller. Do not apply within 7 days of harvest.

GRAPES (East): For control of Grape Berry moth and Grape Leafhopper, apply 2 to 3 pounds IMIDAN 50-WP in 200 gallons of water per acre. For Grape Berry moth, apply prebloom, postbloom, first and late cover sprays as needed. For Grape Leafhopper apply when most nymphs hatch (generally coincides with Berry moth). Spray both sides of each row, also tops of vines to assure adequate coverage of fruit and foliage. Make applications as necessary to maintain control in accordance with insect infestations and local or state spray programs. Do not apply within 14 days of harvest.

NECTARINES: For control of Apple Maggot, Oriental Fruit Moth, Peach Twig Borer, Plum Curculio, Red Banded Leafroller, apply 1 to 1-1/2 pounds per 100 gallons water (or maximum of 6 pounds per acre per application) as a full cover spray. For heavy insect infestations use the higher dosage rate. Repeat as necessary in accordance with insect infestations and local or state spray programs. Usually suppresses European Red and Two Spotted Mites when used in a seasonal program. Do not apply within 14 days of harvest. Do not use Omite in combination with IMIDAN 50-WP on late maturing nectarine varieties as fruit injury may result.

PEACHES: For control of Oriental Fruit Moth, Peach Twig Borer, Plum Curculio and Tarnished Plant Bug, apply 1 to 1-1/2 pounds per 100 gallons water (or maximum of 6 pounds per acre per application) as a full cover spray. For heavy insect infestations use the higher dosage rate. Repeat as necessary in accordance with insect infestations and local or state spray programs. Usually suppresses European Red and Two Spotted Mites when used in a seasonal program. Do not apply within 14 days of harvest.

PEARS: For control of Codling Moth, Elm Spanworm, Fruit Tree Leafroller, Green Apple Aphid, Gypsy Moth, Pear Psylla, Plum Curculio, Red Banded Leafroller, Rosy Apple Aphid and Tarnished Plant Bug, apply 1 to 1-1/2 pounds per 100 gallons of water (or maximum of 10 pounds per acre per application) as a full cover spray. For heavy insect infestations use the higher dosage rate. Repeat as necessary in accordance with insect infestations and local or state programs. Usually suppresses European Red and Two Spotted Mites when used in a seasonal program. Do not apply within 7 days of harvest. Recommended for control of Elm Spanworm, Gypsy Moth and Fruit Tree Leafroller in Northeast only.

PECANS: For control of Pecan Nut Casebearer*, Pecan Weevil and Hickory Shuckworm, apply 1-1/2 pounds IMIDAN 50-WP per 100 gallons of water as a full cover spray when infestation starts. Repeat as necessary in accordance with insect infestations and local or state programs. For Pecan Weevil, repeat applications should be made at 7 day intervals. Do not apply within 14 days of harvest. Do not graze livestock on cover crops grown in treated pecan groves.

*Recommended for Pecan Nut Casebearer in Texas only.

PLUMS, PRUNES: For control of Apple Maggot, Codling Moth*, Oriental Fruit Moth, Peach Twig Borer, Plum Curculio, Red Banded Leafroller, apply 1 to 1-1/2 pounds per 100 gallons water (or maximum of 6 pounds per acre per application) as a full cover spray. For heavy insect infestations use the higher dosage rate. Repeat as necessary in accordance with insect infestations and local or state spray programs. Usually suppresses European Red and Two Spotted Mites when used in a seasonal program. Do not apply within 7 days of harvest.

*For control of Codling Moth in California only, apply 1 pound per 100 gallons water (or a maximum of 6 pounds per acre per application) by ground equipment.

FRUIT AND NUT CROPS -- DORMANT APPLICATIONS (Pacific Coast States Only)

Almonds, Apples, Apricots, Cherries, Nectarines,
Peaches, Pears, Plums, Prunes San Jose Scale

Almonds, Apricots, Cherries, Nectarines, Peaches,
Plums, Prunes Peach Twig Borer

Use 1 pound IMIDAN 50-WP per 100 gallons of water plus suitable spray oil according to oil manufacturer's specifications. Make thorough coverage using conventional ground sprayers.

FIELD, FORAGE, AND VEGETABLE CROPS

ALFALFA (Arizona, California, Nevada Only): For control of Common Alfalfa Weevil Larvae and Egyptian Alfalfa Weevil Larvae, apply 1-1/2 pounds of IMIDAN 50-WP in 10 to 50 gallons of water per acre (20 to 50 gallons of water for dense stands) by ground equipment, or in 5 to 10 gallons of water per acre by aircraft. Consult your local Farm Advisor regarding the proper timing of application. Larvae should be sprayed when they are actively feeding. Do not apply more than once per cutting. Do not graze or cut for hay within 14 days of application. Do not use a spreader, sticker, or surfactant with IMIDAN 50-WP on alfalfa in Arizona, California, or Nevada.

ALFALFA (Except Arizona, California, Nevada): For control of Common and Egyptian Alfalfa Weevil Larvae and Adults, Potato Leafhopper*, Meadow Spittlebug and Alfalfa Blotch Leafminer, apply 2 pounds IMIDAN 50-WP in 10 to 50 gallons of water per acre (20 to 50 gallons of water for dense stands) by ground equipment or 2 pounds IMIDAN 50-WP in 2 to 10 gallons of water per acre by aircraft. Consult your local County Agent or Extension Service Representative regarding the proper timing of application. Larvae should be sprayed when they are actively feeding. Application for adult weevils should be timed to periods of visible activity. For Alfalfa Blotch Leafminer and Meadow Spittlebug, application should be made when first signs of infestation are visible. Do not apply more than once per cutting. Do not graze or cut for hay within 7 days of application.

*Recommended for control of Potato Leafhopper in Northeast and North Central States Only.

CORN (Corn Belt Only): For suppression of Corn Rootworm adult populations apply 1/2 to 1 pound IMIDAN 50-WP in 2 to 5 gallons of water per acre by aircraft, or in 20 to 50 gallons of water per acre by ground equipment. Apply when beetles are present in sufficient numbers to warrant treatment for protection of the silk from adult feeding. Consult your local county agent or Extension Service representative regarding proper timing of application. Do not apply within 14 days of harvest.

COTTON (Except San Joaquin Valley, CA) For control of the overwintering generation of Boll Weevils apply 1/2 to 1 pound of IMIDAN 50-WP per acre in 5 to 20 gallons of water by ground equipment or 1 pound IMIDAN 50-WP per acre in 3 to 5 gallons of water by aircraft. Make two applications. The first application should be made at the 1/3 grown square stage and the second application 5 to 7 days later. Use the higher rate under heavy infestations. For control of first, second, or third generation Boll Weevils, apply 1-1/2 to 2 pounds IMIDAN 50-WP in 3 to 5 gallons of water per acre by aircraft or in 5 to 20 gallons of water per acre by ground equipment. Make applications at intervals of 3 to 7 days depending upon weevil population and weevil migration in

fields. Use the higher rate for heavy infestations. Check infestations regularly. Do not exceed 20 pounds IMIDAN 50-WP per acre per season. Do not apply within 21 days of harvest. Do not graze or feed forage to livestock. Use on cotton prohibited in Copiah and Claiborne Counties, MS; Lauderdale and Madison Counties, AL; and Lawrence County, TN. Do not apply within one mile of any coastal or estuarine waters. Do not apply within 100 feet of aquatic habitats.

PEAS, FRESH AND DRY (Pacific Northwest Only): For control of Pea Weevil and Pea Leaf Weevil, apply 1-1/2 to 2 pounds IMIDAN 50-WP in 5 to 10 gallons of water per acre by aircraft, or in 20 to 50 gallons of water per acre by ground equipment. Apply between emergence and early pod formation when adult populations are present but before eggs are laid. Consult your Local County Agent or Extension Service Representative regarding proper timing of application. Do not apply within 7 days of harvest. Do not graze or feed forage to livestock within 7 days of application. Do not cut treated fresh pea forage for hay within 10 days of application.

POTATOES: For control of Colorado Potato Beetle, Potato Flea Beetle, Potato Leafhopper, apply 2 pounds per acre (1-1/2 to 2 lb. per acre for Colorado Beetle and Potato Flea Beetle in the Northeast) in sufficient water to provide good coverage. Repeat applications as necessary throughout the growing season. Do not apply within 7 days of harvest. Not recommended for use on potatoes in California.

DECIDUOUS SHADE AND ORNAMENTAL TREES AND WOODY EVERGREENS

IMIDAN 50-WP is recommended for use by commercial applicators on Deciduous Shade and Ornamental Trees and Woody Evergreens in parks, residential and recreational areas, along thoroughfares and other localized areas where infestations of Gypsy Moth, Spring Cankerworm, Elm Spanworm, Birch Leaf Miner, Eastern Tent Caterpillar, Elm Leaf Beetle Larvae, or Japanese Beetle occur. When such insects or their damage occur, apply at a rate of 1 to 1-1/2 pounds IMIDAN 50-WP per 100 gallons of water, thoroughly wetting all parts of the affected plants to the point of runoff. For heavy insect infestations use the higher dosage rate. Repeat application as necessary to maintain insect control.

- . Recommended on Deciduous Shade and Ornamental Trees (such as Ash, Beech, Oak, Dogwood, Willow, Hickory, Locust, Hawthorne, Birch, Elm, Maple) to control: Gypsy Moth, Spring Cankerworm, Elm Spanworm, Eastern Tent Caterpillar, Elm Leaf Beetle Larvae, Japanese Beetle.
- . Recommended on Woody Evergreens (such as Arborvitae, Cedar, Fir, Hemlock, Juniper, Pine, Spruce, Yew) to control: Gypsy Moth.
- . Recommended on Birch Trees to control: Birch Leaf Miner.

Choose a cool, calm period, preferably in early morning or evening. Do not apply if rain is expected or before leaf surfaces are dry.

PINE SEEDLINGS

White, Slash and Loblolly: For control of Pales Weevil (Hylobius pales) and Pitch-eating Weevil (Pachylobius picivorus). Use IMIDAN 50-WP as a 4% top dip, dipping down to and including the root collar only. Dip in bundles loose enough to allow solution to penetrate the bundles. Avoid coverage of roots. Swish tops in solution for 10-15 seconds to assure adequate coverage of all top growth. Drain and allow seedlings to dry before planting. Agitate solution frequently to keep IMIDAN 50-WP in suspension. The addition of an extender such as Nu-Film 17® or Plantgard® may help to retain the IMIDAN 50-WP on the foliage under high rainfall conditions.

Some slight needle burn and first year growth reduction may occur following treatment of loblolly pine.

Wear rubber gloves during treating and planting.

DILUTION TABLE FOR A 4% TOP DIP

<u>TO MAKE</u>	<u>5 gallons</u>	<u>30 gallons</u>	<u>50 gallons</u>	<u>100 gallons</u>
Use this amount of IMIDAN 50-WP . .	3-1/2 lbs.	20 lbs.	33-1/2 lbs.	67 lbs.

Agitate frequently to keep IMIDAN 50-WP in suspension. Five gallons of solution should be enough to treat 10,000 seedlings. Do not keep IMIDAN solution overnight. Make up a fresh batch each day that seedlings will be dipped.

Nu-Film® is a registered trademark of Miller Chemical & Fertilizer Corp.

Plantgard® is a registered trademark of Polymetrics International Inc.

