

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

901 / 543 2250  
17 / 32

18 DEC 1992

Ms. Anne Stout  
Registration Specialist  
Gowan Company  
P.O. Box 5569  
Yuma, Arizona 85366-9255

Dear Ms. Stout:

Subject: REVISED LABELING TO REFLECT UP-DATE  
Precautionary, Statements of Practical  
Treatment and Other Label Revisions  
IMIDAN 50-WP Agricultural Insecticide  
EPA Registration Number 10163-166  
Your Amended Application Dated July 25, 1991 and  
Letter Dated August 6, 1992 and 12/9/92 ~~12/9/92~~

The Amended labeling referred to above, submitted in connection with registration under Federal Insecticide, Fungicide, and Rodenticide Act, as amended, is acceptable provided the following label changes are made.

1). In the "If in eyes" statement of practical treatment, revise the statement to read,

"If In Eyes: Hold eyelids apart and flush eyes with plenty of water. Get medical attention if irritation persists."

2). In the environmental hazards section, delete the statement regarding wetlands and replace it with the statement:

"Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark."

3). Qualify Christmas Trees as Follows: "Christmas Tree Plantations."

**BEST AVAILABLE COPY**

CONCURRENCES

SYMBOL	H7505C						
SURNAME	H. H. [Signature]						
DATE	12-9-92						

Submit five (5) copies of your final printed labeling before you release the product for shipment.

A stamped copy is enclosed for your records.

Sincerely,

George T. Lakocca  
Product Manager (13)  
Insecticide-Rodenticide Branch  
Registration Division (H7505C)

Enclosure:

CC: Bridgid D. Lowery  
CS-1, RM 33G6  
H7508W

DEC 1992

11: Imidan.6  
August 6, 1992

Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No.

**IMIDAN 50-WP**  
**AGRICULTURAL INSECTICIDE--WETTABLE POWDER**

10163-164

For Agricultural Use Only

FILE COPY

**ACTIVE INGREDIENT:**

Phosmet: N-(Mercaptomethyl)phthalimide, S-(O,)-dimethyl phosphorodithioate) . . . . . **.50%**

**INERT INGREDIENTS:** . . . . . **.50%**  
**100%**

**KEEP OUT OF REACH OF CHILDREN**

**WARNING--AVISO**

**PRECAUCION AL USUARIO: SI USTED NO LEE INGLES, NO USE ESTE PRODUCTO HASTA QUE LA ETIQUETA LE HAYA SIDO EXPLICADA AMPLIAMENTE.**

**STATEMENT OF PRACTICAL TREATMENT**

Call a Poison Center or a physician immediately. If a known exposure occurs or is suspected, immediately start the recommended procedures below. Simultaneously contact a Poison Center, a physician, or the nearest hospital.

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 person contacted that the compound is a cholinesterase inhibitor.

**NOTE TO MEDICAL PERSONNEL:** Expcsure may cause cholinesterase inhibition. Atropine by injection is antidotal. 2-PAM (Protopam Chloride) is also antidotal when administered early and in conjunction with atropine.

**IF SWALLOWED:** Immediately give several glasses 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. If victim is unconscious or convulsing, do not induce vomiting or give anything by mouth.

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

**IF ON SKIN:** Flush all affected areas with plenty of water for several minutes. Remove and clean contaminated clothing and shoes. Seek medical attention if skin irritation occurs.

**IF IN EYES:** Hold eyelids apart and flush eyes with large amounts of running water for 15 minutes. Seek medical attention if eye irritation occurs.

**FOR 24-HOUR EMERGENCY ASSISTANCE, CALL CHEMTREC: (800) 424-9300**

**PRECAUTIONARY STATEMENTS  
HAZARDS TO HUMANS AND DOMESTIC ANIMALS  
WARNING--AVISO**

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 dust or spray mist. Wash hands thoroughly after handling and before eating or smoking. Wash all contaminated clothing with soap and hot water before reuse.

**ENVIRONMENTAL HAZARDS**

This pesticide is extremely toxic to fish. Do not apply directly to water or wetlands (swamps, bogs, marshes, and potholes). Do not contaminate water when disposing of equipment washwaters.

This product is highly toxic to bees exposed to direct treatment on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops while bees are actively visiting the treatment areas.

**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 spray solution has a pH of 7 or higher. The pH of the spray solution must be corrected by the addition of a suitable buffering or acidifying agent for optimum insecticidal activity.

**NOTICE ON CONDITIONS OF SALE**

Our recommendations for 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. The buyer must assume all responsibility, including injury and damage, resulting from its misuse as such, or in combination with other materials.

**GOWAN COMPANY  
P.O. BOX 5569  
YUMA, ARIZONA 85366**

EPA REG. NO. 10163-166

EPA EST. NO. 10163-AZ-1

**DIRECTIONS FOR USE**

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

**REENTRY STATEMENT**

Do not allow worker reentry into treated fields within 24 hours of application unless appropriate protective clothing is worn. Protective clothing means, at least, a hat or other suitable head covering, a long-sleeved shirt and long-legged trousers or a coverall type garment (all closely woven fabric covering the body, including the arms and legs) shoes and socks.

Written or oral warnings must be given to workers who are expected to be in a treated area or in an area about to be treated with this product. Oral warnings must be given if there is reason to believe that written warnings cannot be understood by workers.

When oral warnings are given, warnings shall be given in a language customarily understood by workers and must indicate the specific period of time that treated areas may not be entered without protective clothing. Oral warnings must also include appropriate first aid instructions in case of accidental exposure. These instructions are given in the STATEMENT OF PRACTICAL TREATMENT section at the beginning of this label.

Written warnings must include the following information: "WARNING. Area treated with Imidan Agricultural Insecticide on (date of application). Do not enter treated areas without appropriate protective clothing within 24 hours of application (or other reentry interval if your state has a more restrictive interval for this product). If accidental exposure occurs, follow the instructions below." (Written warnings must include the STATEMENT OF PRACTICAL TREATMENT given at the beginning of this label.)

**PROTECTIVE CLOTHING**

When mixing/loading, wear mid forearm to elbow length chemical resistant gloves, long-sleeve shirt, and long pants. During the application, wear long-sleeve shirt and long pants. Applicator must also wear a wide-brimmed chemical resistant hat while spraying up toward fruit and nut crops.

Any article of clothing worn while applying product must be cleaned before reusing. Clothing should be laundered separately from household articles. Clothing which has been drenched or has otherwise absorbed concentrated pesticide must be disposed of in a sanitary landfill, incinerated, or burned if allowed by State and local authorities.

**DILUTION DIRECTIONS**

The rate required for thorough, uniform coverage varies with plant growth at time of application. Except as specified for certain uses, the following rates are therefore intended to cover a broad range of conditions.

**Dilute Application**

Field and Row Crops: Apply specified rate in 20 to 75 gallons of water per acre.

Tree and Vine Crops: Apply specified rate in 100 to 800 gallons of water per acre. For citrus, see specific crop directions for dilution guidelines.

#### Concentrate Application

Field and Row Crops: Apply specified rate in not less than 5 gallons of water per acre.

Tree and Vine Crops: Apply specified rate in 20 to 100 gallons of water per acre. Special concentrate equipment is necessary for these applications.

#### Air Application

Field and Row Crops: Apply specified rate in a minimum of 3 gallons of water per acre.

Tree and Vine Crops: Apply specified rate in a minimum of 5 gallons of water per acre.

#### MIXING DIRECTIONS

Pour 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.

#### USE LIMITATIONS

Do not exceed the maximum rate of Imidan 50-WP per acre or the time limitations specified for the individual crops. [In California, use as minimum of 4 pounds of Imidan 50-WP per acre on mature Pome and Stone Fruit Trees (. 1/2 pounds on Cherries)].

#### CHEMIGATION STATEMENT

Apply this product only through one or more of the following types of systems: sprinkler (including center pivot, lateral move, end tow, side(wheel) roll, traveler, solid set, or hand move). Do not apply this product through any other type of irrigation system.

Refer to supplemental labeling found elsewhere on this label entitled GENERAL CHEMIGATION INSTRUCTIONS for specific directions for use.

#### RECOMMENDATIONS

##### FRUIT AND NUT CROPS

NOTE: Imidan 50-WP may be used during dormancy to control specified insects listed in each crop grouping which may overwinter on the tree and vine crops. Imidan 50-WP may be used in combination with spray oils; always follow spray oil manufacturer's label recommendations.

#### SPLIT APPLICATION SPRAY SCHEDULES

Applications to tree fruits and nuts may be made using a split application spray schedule as recommended below. Each schedule counts for one application. See crop for more specific application directions (if applicable).

#1: Apply one-half the approved rate per acre followed 5 to 7 days later with a second half of the approved rate. Both applications must be made to achieve control. Unless otherwise indicated, applications may be made by ground or air.

#2: Apply recommended rate per acre to every other row, followed with the recommended rate per acre 5 to 7 days later to alternate rows. Both applications must be made to achieve control.

**ALMONDS:** For control of Peach Twig Borer; Use 6 lbs. per acre. Do not apply within 30 days of harvest. Limit use on bearing almonds to one foliar application per season.

**APPLES (EAST OF THE ROCKIES):** For control of Apple Maggot, Codling Moth, Elm Spanworm, European Corn Borer, European Saw-Fly, Fruit Tree Leafroller, Green Fruitworm, Gypsy Moth, Japanese Beetle, Obliquebanded Leafroller\*, Oriental Fruit Moth, Peach Twig Borer, Plum Curculio, Red Banded Leafroller, Red humped Caterpillar, and San Jose Scale; Use 3 to 8 lbs. per acre\*per application. For heavy insect infestations, use higher dosage rates. Repeat as necessary in accordance with insect infestations and local or State spray programs. May suppress European Red and Two Spotted Mites when used in a seasonal program. Do not apply within 7 days of harvest. (\*In some areas, these species may have developed resistance to organophosphate insecticides. Consult your local agricultural advisor or cooperative extension service for recommendations.)

\*~~(or 1 to 1 1/2 lbs. per 100 gals.~~ not to exceed 8 lbs. per acre) d

**TANK MIX (NORTHEAST ONLY):** For control of the insects listed above for apples, plus Apple Aphid, Rosy Apple Aphid, Tarnished Plant Bug, Spotted Tentiform Leafminer, Tufted Apple Budmoth, and White Apple Leafhopper, a tank mix of Imidan 50-WP and methomyl (Lannate\*) may be used as follows: Mix 1/2 to 1 lb. of Imidan 50-WP plus 1/2 to 1 pt. of methomyl 1.8L or 2 to 4 ounces of methomyl

90% S.P. per 100 gallons of water. Apply as a full cover spray using up to 400 gallons per acre. Repeat as necessary in accordance with insect infestation and local or State spray programs. Do not use on Early MacIntosh or Wealthy varieties. Do not apply within 8 days of harvest. Do not graze/feed livestock under treated trees for 10 days after application.  
\*Lannate is a registered trademark of E.I. du Pont de Nemours and Company, Inc.

**APPLES (WEST OF THE ROCKIES):** For control of Apple Maggot, Codling Moth, European Saw-Fly, Green Apple Aphid, Japanese Beetle, Orange Tortrix, Peach Twig Borer, Plum Curculio, Red Banded Leafroller, Redhumped Caterpillar, Rosy Apple Aphid, and San Jose Scale; Use 5 to 8 lbs. per acre. For heavy insect infestations, use higher dosage rates. Repeat as necessary in accordance with insect infestations and local or State spray programs. Do not apply within 7 days of harvest.

**APRICOTS (EAST OF THE ROCKIES):** For control of Apple Maggot, Oriental Fruit Moth, Peach Twig Borer, Plum Curculio, and Red Banded Leafroller; Use 3 to 6 lbs. per acre\*per application. For heavy insect infestations, use higher dosage rates. Repeat as necessary in accordance with insect infestations and local or State spray programs. May suppress European Red and Two Spotted Mites when used in a seasonal program. Do not apply within 14 days of harvest. \*(or 1 to 1 1/2 lbs. per 100 gals. not to exceed 6 lbs. per acre)

**APRICOTS (WEST OF THE ROCKIES):** For control of Apple Maggot, Oriental Fruit Moth, Peach Twig Borer, Plum Curculio, and Red Banded Leafroller; Use 6 lbs. per acre per application. Repeat as necessary in accordance with insect infestations and local or State spray programs. Do not apply within 14 days of harvest.

**BLUEBERRIES (NORTHEASTERN U.S. ONLY):** For control of Blueberry Maggot, Cranberry Fruitworm, Japanese Beetle, Plum Curculio, Oblique-banded Leaf Roller, Red-banded Leaf Roller; Use 2 lbs. Imidan 50-WP 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 before harvest.

**CHERRIES, SOUR (TART):** For control of Cherry Fruit Fly, Fruit Tree Leafroller, Japanese Beetle, Peach Twig Borer, Plum Curculio, and San Jose Scale; Use 3 to 3 1/2 lbs. per acre\*per application. Repeat as necessary in accordance with insect infestations and local or State spray programs. May suppress European Red and Two Spotted Mites when used in a seasonal program. Do not apply within 7 days of harvest. \*(or 1 lb. per 100 gals. not to exceed 3 1/2 lbs. per acre)

**CITRUS (LEMONS, ORANGES) (California, Arizona, and Texas only):** For control of California Red Scale and Brown Cit Scale; Use 1 to 2 lbs. per 100 gals. Imidan 50-WP plus 1 to 2 quarts per 100 gals. of a suitable spray oil OR according to oil manufacturer's specifications. Apply as a full cover spray (up to a maximum of 30 lbs. per acre per application.) Repeat as necessary in accordance with scale infestations and local or State spray programs. A total of



9517  
3 applications per season may be made with a 30 day interval between each spray. Do not apply within 7 days of harvest.

**GRAPES (EAST):** For control of European Rose Chafer, Fleabeetle, Grape Berry moth, Grape Cane Borer, Grape Cane Girdler, Grape Leafhopper, Grape Mealybug, Japanese Beetle, and Redbanded Leafroller; Use 2 to 3 lbs. 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). Use higher rates for control of Japanese Beetle. 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.

**GRAPES (WEST):** For control of Grape Leaf folder, Omnivorous Leafroller, and Western Grape leaf Skeletonizer; Use 2 lbs. per acre. Spray both sides of each row and tops of vines to assure adequate coverage of fruit and foliage. Applications may be made at any time between egg hatch and pupation for leaf folder, leafroller, and western grape leaf skeletonizer. Do not apply within 7 days of harvest. (In California, the reentry interval is 5 days.)

**NECTARINES (EAST OF THE ROCKIES):** For control of Apple Maggot, Oriental Fruit Moth, Peach Twig Borer, Plum Curculio, and Red Banded Leafroller; Use 3 to 6 lbs. per acre\* per application. For heavy insect infestations, use higher dosage rates. Repeat as necessary in accordance with insect infestations and local or State spray programs. May suppress 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.

\*Omite is a registered trademark of Uniroyal Chemical.

\* (or 1 to 1 1/2 lbs. per 100 gals. not to exceed 6 lbs. per acre)

**NECTARINES (WEST OF THE ROCKIES):** For control of Apple Maggot, early season Climbing Cutworms, Omnivorous Leaf Roller, Oriental Fruit Moth, Peach Twig Borer, Plum Curculio, and Red Banded Leafroller; Use 6 lbs. per acre per application. For heavy insect infestations, use higher dosage rates. Repeat as necessary in accordance with insect infestations and local or State spray programs. 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.

\*Omite is a registered trademark of Uniroyal Chemical.

**PEACHES (EAST OF THE ROCKIES):** For control of Japanese Beetle, Oriental Fruit Moth, Peach Twig Borer, and Plum Curculio; Use 3 to 6 lbs. per acre\* per application. For heavy insect infestations, use higher dosage rates. Repeat as necessary in accordance with insect infestations and local or State spray programs; May suppress European Red and Two Spotted Mites when used in a seasonal program. Do not apply within 14 days of harvest.

\* (or 1 to 1 1/2 lbs. per 100 gals. not to exceed 6 lbs. per acre)

**PEACHES (WEST OF THE ROCKIES):** For control of early season Climbing Cutworms, Japanese Beetle, Oriental Fruit Moth, Omniverous Leaf Roller, Peach Twig Borer, and Plum Curculio; Use 6 lbs. per acre per application. For heavy insect infestations, use higher dosage rates. Repeat as necessary in accordance with insect infestations and local or State spray programs. Do not apply within 14 days of harvest. (In California, do not reenter treated orchard for 5 days.)

**PEARS (EAST OF THE ROCKIES):** For control of Codling Moth, Elm Spanworm, Fruit Tree Leafroller, Gypsy Moth, Plum Curculio, and Red Banded Leafroller; Use 3 to 10 lbs. per acre per application. Use higher rates for heavy insect infestations. Repeat as necessary in accordance with insect infestations and local or State programs. May suppress European Red and Two Spotted Mites when used in a seasonal program. Do not apply within 7 days of harvest.

*(or 1 to 1 1/2 lbs. per 100 gals. not to exceed 10 lbs. per acre)*

**PEARS (WEST OF THE ROCKIES):** For control of Codling Moth, Elm Spanworm, Fruit Tree Leafroller, Gypsy Moth, Pear Psylla, Plum Curculio, and Red Banded Leafroller; Use 5 to 10 lbs. per acre per application. Use higher rates for heavy insect infestations. Repeat as necessary in accordance with insect infestations and local or State programs. Do not apply within 7 days of harvest.

**PECANS:** For control of Pecan Nut Casebearer\*, Pecan Weevil, and Hickory Shuckworm; Use 4 1/2 lbs. per acre applied 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.

*\*\*\* (or 1 1/2 lbs per 100 gals. not to exceed 4 1/2 lbs. per acre)*

\*Recommended for Pecan Nut Casebearer in Texas only.

**PLUMS, PRUNES (EAST OF THE ROCKIES):** For control of Apple Maggot, Codling Moth, Oriental Fruit Moth, Peach Twig Borer, Plum Curculio, Red Banded Leafroller, and Redhumped Caterpillar; Use 3 to 6 lbs. per acre per application. For heavy insect infestations, use higher dosage rates. Repeat as necessary in accordance with insect infestations and local or State spray programs. May suppress European Red and Two Spotted Mites when used in a seasonal program. Do not apply within 7 days of harvest.

*\*\*\* (or 1 to 1 1/2 lbs. per 100 gals. not to exceed 6 lbs. per acre)*

**PLUMS, PRUNES (WEST OF THE ROCKIES):** For control of Apple Maggot, Codling Moth, Omniverous Leaf Roller, Oriental Fruit Moth, Peach Twig Borer, Plum Curculio, Red Banded Leafroller, and Redhumped Caterpillar; Use 5 to 6 lbs. per acre per application. For heavy insect infestations and control of Codling Moth in California, use the higher dosage rate. Repeat as necessary in accordance with insect infestations and local or State spray programs. Do not apply within 7 days of harvest.

#### FIELD, FORAGE, AND VEGETABLE CROPS

**ALFALFA (Arizona, California, and Nevada only):** For control of Common Alfalfa Weevil Larvae and Egyptian Alfalfa Weevil Larvae; Use 1 1/2 lbs. of Imidan 50-WP per acre in a minimum of 10 gallons

of water by ground equipment (20 gallons for dense stands) or 5 gallons of water 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 apply to alfalfa in the bloom period. Do not use with latex or pineolin based adjuvants or any agricultural sticker or extender.

For Pea Aphids, apply the recommended rate of Imidan 50-WP in combination with 1/3 to 2/3 pt. Dimethoate 2.67E or 1/4 to 1/2 pt. Dimethoate 4E. Do not apply more than once per cutting. Do not graze or cut hay within 14 days of application. Do not apply to alfalfa in the bloom period. Wear the protective clothing specified on the Dimethoate label when preparing and using this combination.

ALFALFA (Except Arizona, California, Nevada): For control of Common and Egyptian Alfalfa Weevil Larvae and Adults, Potato Leafhopper\*, Meadow Spittlebug, and Alfalfa Blotch Leafminer; Use 2 lbs. per acre in minimum of 10 gallons of water by ground equipment (20 gallons for dense stands) or a minimum of 2 gallons of water 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. Do not apply to alfalfa during the bloom period.



\*Recommended for Potato Leafhopper in the Northeast and North Central States only.

For Pea Aphids; Use the recommended rate of Imidan 50-WP in combination with 1/3 to 2/3 pt. Dimethoate 2.67E or 1/4 to 1/2 pt. Dimethoate 4E. Do not apply more than once per cutting. Do not graze or cut for hay within 10 days of application. Do not apply to alfalfa in the bloom period. Wear the protective clothing specified on the Dimethoate label when preparing and using this combination.

CORN (CORN BELT ONLY): For control of Corn Rootworm adult populations, use 1/2 to 1 lb. Imidan 50-WP in a minimum of 2 gallons of water per acre by aircraft or in a minimum of 20 gallons of water by ground equipment. Apply when beetles are present in sufficient numbers to warrant treatment for protection of the silk from adult feeding. May aid in the suppression of European Corn Borer when applied on the 7th and 15th day of the flight of the second brood. 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 lb. per acre in a minimum of 5 gallons of water by ground equipment or 1 lb. per acre in a minimum of 3 gallons of water by aircraft. Make 2 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 lbs. Imidan 50-WP in the same amount of water as specified above. 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 lbs. of 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; Use 1 1/2 to 2 lbs. per acre in a minimum of 5 gallons of water by aircraft or 20 gallons of water 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 harvest. Do not cut treated fresh pea forage for hay within 10 days of application.

**POTATOES:** For control of Colorado Potato Beetle, Potato Flea Beetle, and Potato Leafhopper; Use 2 lbs. per acre in sufficient water to provide good coverage. Repeat applications as necessary throughout the growing season. For application by irrigation systems: Apply specified dosage per acre. Follow all directions under the CHEMIGATION section of this label. Do not apply within 7 days of harvest. Use only on potatoes to be harvested by machine. Not recommended for use on potatoes in California.

**FIELD MARGINS:** For control of grasshoppers in margins of cultivated fields and forage crops, apply 3 to 4 lbs. Imidan 50-WP in 10 to 50 gallons of water per acre (20 to 50 gallons of water for dense stands) or in 5 to 10 gallons of water by aircraft. Do not graze livestock in treated area. Do not harvest for food or feed.

#### **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, Japanese Beetle, or Redhumped Caterpillar occur. When such insects or their damage occur, apply at a rate of 1 to 1 1/2 pounds per 100 gallons 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, Liquidambar, Hawthorne, Birch, Elm, Maple) to control: Gypsy Moth, Spring Cankerworm, Elm Spanworm, Eastern Tent Caterpillar, Elm Leaf Beetle Larvae, Japanese Beetle, and Redhumped Caterpillar.

\*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, preferable in early morning or evening. Do not apply if rain is expected or before leaf surfaces are dry.

**CHRISTMAS TREES:** To control Scale species, Sawfly species, European Pine Shoot Moth (Rhyacionia buoliana), Eastern Pine Shoot Moth, Nantucket Pine Tip Moth, Pitch Eating Weevil, Pales Weevil, adult Root Collar Weevil; Use 2 lbs. per acre in sufficient water to achieve thorough and complete coverage through ground or aerial application equipment. Apply when pest populations reach economic threshold levels as determined by the local extension service, Forest Service, or other monitoring systems.

**PINE TREES (Pacific Northwest only):** For control of European Pine Shoot Moth (Rhyacionia buoliana); Use 2 pounds Imidan 50-WP per acre or for individual trees at a rate of . pounds per 100 gallons of water. Spray trees for thorough coverage of foliage. Repeat at 2 week intervals throughout flight period of the moths.

**PINE SEEDLINGS (White, Slash, and Loblolly):** For control of Pales Weevil (Hylobius pales) and Pitch-eating Weevil (Tachylobius picivorus); Use Imidan 50-WP as a 4% top dip, dipping down to and including 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 to 15 seconds to assure adequate coverage of all top growth. Drain and allow seedlings to dry before planting. The addition of an extender such as Nu-Film 17\* may help retain the Imidan 50-WP on the foliage under high rainfall conditions. Some slight needle burn and first year growth reductions may occur on treatment of loblolly pine. Wear rubber gloves during treating and planting.

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

#### DILUTION TABLE FOR A 4% TOP DIP

TO MAKE	5 GALLONS	30 GALLONS	50 GALLONS	100 GALLONS
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.

**STORAGE AND DISPOSAL**

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

**STORAGE:** Store in a cool, dry place.

**PESTICIDE DISPOSAL:** Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

**CONTAINER DISPOSAL:** Completely empty bag into application equipment. Then dispose of empty bag in a sanitary landfill or by incineration, or if allowed by State and local authorities, by burning. If burned, stay out of smoke.

**SPILL OR LEAK:** A small spill can be handled routinely. Use adequate ventilation and wear an air-supplied respirator to prevent inhalation. Wear suitable protective clothing and eye protection to prevent skin and eye contact. Use the following procedures:

1. Sweep up spilled material being careful not to create dust.
2. Place sweepings in an open drum.
3. Generously cover the contaminated areas with a common household detergent. Using a stiff brush and small amounts of water, work the detergent into the spill material forming a slurry. Do not splatter on one's self or bystanders, and completely avoid skin or eye contact with this material. Brush the slurry into cracks and crevices and allow to stand for 2 to 3 minutes.
4. Spread a suitable absorbent such as clay, sawdust, or kitty litter on the slurried liquid. Shovel absorbed material into an open drum.
5. Repeat if necessary.
6. Flush area with water while observing proper environmental considerations.
7. Seal drum and dispose of contaminated material in an approved pesticide landfill.

) Large spills must be handled according to a predetermined plan. For assistance in developing a plan, contact Gowan Company.

## GENERAL CHEMIGATION INSTRUCTIONS

Apply this product only through one or more of the following types of systems: sprinkler, including center pivot, lateral move, end tow, side (wheel) roll, traveler, solid set or hand move. Do not apply this product through any other type of irrigation system.

Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from nonuniform distribution of treated water.

If you have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers, or other experts.

Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system unless the pesticide label-prescribed safety devices for public water systems are in place.

A person knowledgeable of the chemigation system and responsible for its operation or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.

### FOR CHEMIGATION SYSTEMS CONNECTED TO PUBLIC WATER SYSTEMS

Public water system means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year.

Do not apply Imidan 50-WP through any irrigation system supplied by a public water system unless the water from the public water system is discharged into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the outlet end of the fill pipe and the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe. Before beginning chemigation, always make sure that the air gap exists and that there is no blockage of the overflow of the reservoir tank.

The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.

The pesticide injection pipeline must contain a functional, normally closed, solenoid operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.

The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops, or in cases where there is not a water pump, when the water pressure decreases to the point where pesticide distribution is adversely affected.

Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

Do not apply when wind speed favors drift beyond the area intended for treatment.

Center pivot, motorized lateral move, traveling gun types of equipment: inject into the system for one revolution or run. Shut off injection equipment after one revolution or run, but continue to operate irrigation system until IMIDAN 50-WP has been cleared from last sprinkler head. Do not use end guns. The system should be run at maximum speed for a foliar application.

Wheel move, side roll, end tow, solid set or hand move types of equipment: adjust equipment to inject IMIDAN 50-WP over a 30 to 60 minute period. Shut off injection equipment. Continue to operate irrigation system until IMIDAN 50-WP has been cleared from last sprinkler head. IMIDAN 50-WP can be injected at the end of an irrigation cycle, or as a separate application. Do not use end guns.

8 IMIDAN 50-WP must be premixed in a supply tank with water and other appropriate tank mixed chemicals. Agitation is necessary at all times. Caution must be exercised in irrigation waters with a pH greater than 7. If the irrigation cycle will last longer than 24 hours and the Imidan 50-WP is premixed in the supply tank, the tank mix must be buffered to a pH of 6-6.5. Please contact your Gowan sales representative should this situation apply.

Application should be in sufficient water and of sufficient duration to apply the recommended rate evenly over the entire treated area. No field run-off can be permitted during chemigation.

#### SPRINKLER IRRIGATION SYSTEMS

The system must contain a functional check valve, and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.

The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.

The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.

The system must contain functional interlocking controls to automatically shut off the pesticide injections pump when the water pump motor stops.



The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.

Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

Do not apply when wind speed favors drift beyond the area intended for treatment.

Center pivot, motorized lateral move, traveling gun types of equipment: inject into the system for one revolution or run. Shut off injection equipment after one revolution or run, but continue to operate irrigation system until IMIDAN 50-WP has been cleared from last sprinkler head. Do not use end guns. The system should be run at maximum speed for a foliar application.

Wheel move, side roll, end tow, solid set or hand move types of equipment: adjust equipment to inject IMIDAN 50-WP over a 30 to 60 minute period. Shut off injection equipment. Continue to operate irrigation system until IMIDAN 50-WP has been cleared from last sprinkler head. IMIDAN 50-WP can be injected at the end of an irrigation cycle, or as a separate application. Do not use end guns.

IMIDAN 50-WP must be premixed in a supply tank with water and other appropriate tank mixed chemicals. Agitation is necessary at all times. Caution must be exercised in irrigation waters with a pH greater than 7. If the irrigation cycle will last longer than 2 hours and the Imidan 50-WP is premixed in the supply tank, the tank mix must be buffered to a pH of 6-6.5. Please contact your Gowan sales representative should this situation apply.

Application should be in sufficient water and of sufficient duration to apply the recommended rate evenly over the entire treated area. No field run-off can be permitted during chemigation.